

CAAAGTCGGT TTAGTAACAT GTATGTATGT AAATAATGTA ACTGGACAAA TACAGCCTAT 420  
TCCACAAATG GCTAAAGTTA TAAAAAATTA TCCTAAGGCA CATTTTCATG TAGATGCGGT 480  
5 TCAAGCATTG GGCAAAATTT CAATGGATCT CAATAACATA GATAGTATTA GTTTAAGTGG 540  
ACACAAGTTT AATGGTTTAA AAGGACAAGG CGTCTTACTT GTAAATCACA TTCAAATGT 600  
TGAACCAACT GTCCATGGTG GTGGTCAAGA ATATGGTGTT AGAAGTGGAA CAGTTAATTT 660  
10 GCCAAATGAT ATTGCAATGG TTAAAGCGAT GAAGATAGCT AATGAAAAT TTGAAGCATT 720  
GAATGCATTT GTTACTGAGT TAAATAATGA CGTCCGTCAA TTTTAAATA AATATCATGG 780  
15 AGTTTATATT AATTCTTCAA CTTCAGGTTT ACCATTCTGT TTAAATATTA GTTTTCCTGG 840  
CGTAAAAGGT GAAGTATTAG TTAATGCTTT TTCAAAATAT GACATTATGA TATCTACGAC 900  
AAGTGCTTGT TCATCTAAAC GTAATAAATT AAATGAAGTA TTGGCTGCAA TGGGATTATC 960  
20 AGACAAATCT ATTGAAGGTA GTATAAGATT ATCATTGTTGG GCTACTACAA CTAAAGAAGA 1020  
TATAGCGAGG TTAAAGAAA TATTTATCAT CATTATGAG GAAATTAAGG AGTTGCTAAA 1080  
ATAATGAAGT ATGATCACTT GCTTGTTAGA TACGGGGAGT TAACATTAAA GGGTTCAAAT 1140  
25 AGAAAGAAAT TTGTAAATCA ATTAAGAAAT AATGTAAATA AGTCATTAAA AGGACTTGAT 1200  
GGGTTTGTCG TTAAAGGCaA ACGAGATCGT ATGTATATTG AACTTGAAGA CCATGCaGAT 1260  
ATAAATGAAA TAACATATCG ATTATCAAAA ATTTTCGGTA TTAAATCTAT TAGTCCAGTA 1320  
30 TTAAGAGTAG AAAAAACAAT AGAGGCAATA AGTGCAGCGG CAATTAAATT gCGCAGaATT 1380  
TGAAGaAAAC AGCACATTTA AAATTGATGT GAAGCGTGCC CGATTAAAAT TTCCCCAATG 1440  
35 GATACGGTAT GGAATTACAG CGTGGAATTG GGGTGGTGCC AGTATTGGAG CACTTCGCCA 1500  
TATTCCAGT GGATGTCCAA CGTCCCAGnC CCAGGAATT 1539

## (2) INFORMATION FOR SEQ ID NO: 563:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 968 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 563:

50 ATAnCGTATA CATGTGTTCT TTAAATTTGT GATAAGGAGT TTAGGATGGT TTATTTAAAA 60  
TCAATAGATG CCATTGGATT TAAGTCTTTT GCAGATCAAA CCAATGTTCA ATTCGATAAA 120  
GGTGTAAC TG CAATTGTTGG TCCAAATGGA AGCGGTAAAA GTAATATTAC AGATGCTATT 180

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ATCTTCTCAG GTGCAGAACA TCGCAAAGCT CAAAATTATG CTGAAGTACA GTTAAGATTA 300  
 GATAATCATT CTAAAAAGCT CAGTGTGTGAT GAAAACGAAG TTATTGTAAC AAGAAGATTG 360  
 5 TATCGAAGTG GTGAAAGTGA GTACTACATA AATAATGACC GTGCAAGATT AAAAGATATT 420  
 GCCGATTTAT TTTTAGATTG TGGATTGGGA AAAGAAGCGT ATAGCATTaT CTCGCAAGGT 480  
 AGAGTTGATG AAATACTAAA TGCTAAACCA ATTGATAGAC GTCAAATTAT TGAAGAATCG 540  
 10 GCTGGTGTAC TTAAATATAA AAAACGTAAG GCTGAATCAT TAAATAAACT TGACCAAACA 600  
 GAAGATAATT TAACGAGAGT AGAAGACATT TTATATGATT TGGAAGGTCG CGTAGAACCT 660  
 CTAAAAGAGG AGGCAGCTAT AGCTAAAGAA TATAAGACAC TTTCACATCA AATGAAACAT 720  
 15 AGTGACATTG TAGTTACAGT sCACGATATT GATCAATATA CAAATGACAA TAGACAATTA 780  
 GATCAACGTT TAAATGATTT ACAAGGCCAA CAAGCAAATA AAGAAGCTGA CAAGCAACGT 840  
 20 TTAAGCCAAC AAATTCAACA ATATAAAGGT AAACGTCATC AACTTGATAA TGATGTTGAA 900  
 TCgCTTAATT ATCAATTAGT AAAAGCTACG GAAGCCTTTG AAAAATATAC GGGACAATTA 960  
 AATGTTTT 968

(2) INFORMATION FOR SEQ ID NO: 564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 564:

TTGTGTGTAT GCATTCAATG TGCTCTGTTT GTAAATGGCT AGCTATATAA TTTAgGATTG 60  
 GAGGATCGTC ATCGACAACA AGACATTGCA CCATAGCTAT AACTCCCTT ATCTTTTTCA 120  
 40 TTTATTATAC ATGTAAAATA TTTTTCGTA AAAAAACAAT TGTTTCATATT GAGTTTCATAT 180  
 TTCAACCTTA TACTGACGCT AAAGAAGAAA TAGGGAGAAG TGAATCGATA TGAAATTAGC 240  
 GATAAAAGAG ATTATGTTTT ACAAATTTTCG TTATATTTTA ATCACATTAA TCATTCTTTT 300  
 45 ATTAAGTATT ATGGTGTTAT TTATTAGTGG TTAGCTCAn GGGCTTGGA GGGaGAATAT 360  
 TTCGTwATTT GAACACTTTG GATAATGATG aaTATGtTGT TCaAAAAATG AAAGAGCCGC 420  
 aaATTGaGAA ATCGCA 436

(2) INFORMATION FOR SEQ ID NO: 565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 2554 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 565:

	ATGTTTTGTC AATATCAATT GTTTGAGATA AATCCGCTTG TATAAAACGA ACTTTATCAT	60
10	CATTAAATTT GCTAGTTAAT TCATTTATAT CAGTACGATA ATATTGCACA TAAACTTCAA	120
	ATCCATCAGT TAATAATTGT TTGACTATCT CAGAACCAAT TGAACCAGAA CCACCTAATA	180
	CTAATGCTTT CATTACTTTT TAATCTCCAA ACGACTATCG ACTTGCTGAT CTAAATTTAA	240
15	ATATAACGAT GACGTTTCGT TAATACTATC TAACGTGATA TTTTCAACAA TGTCTAACAT	300
	GTCAAACACG CTAACACCTT CAAAATACAA TTTAGTATAT TGATTAGCAA TATATTCAGG	360
	TGAGTTTAAA CTTGATATGA ATTCACCTAT AAATTGCTTT TTCAAAAGTT CAAATGCTTC	420
20	TGCACTCTGG AAAATGCCTT TTTTATCAGC CAACTCATCT AATAATAATT TTTTAAATTT	480
	ATCTGGTTCT TCAGTAGCAC TTGTCACGAT TGAAAACTA TACGTCGGCT CTAGTACAAA	540
25	TTGATAACCA AATGTATCAT CGATAAGTCC TTCGTTTAAAT AAATTCTGAT AAAAATCTGT	600
	TTCTTCCCCA AAAATTAAct CAAAGAATAA TGACATTTCT AAATCACGTT GTACATATTT	660
	TTGAGGCGCT TCTTGTAATG GTTTATTTTT AAAACCAAGC ATTAGTCTTG GTGATTGAAT	720
30	TTTCATAGAT TCAGTAACAA ATGCTTCTTT AACATCCTCC GGTTCATCAA CAAGTCCTCG	780
	TTCGATTTTG GGTGTTTAA CTTTATTACG AGCATCCTCG TGTTGTTTTA CTATTCgACA	840
	TATTGCTTCA GGATCCACAT CGCCAACAAC AAATAAAACC ATATTTGATG GATGATAAAA	900
35	CGTTTCATAA CATAGATACA AATCATCTTT TGTAATATCG TATATACTTT CTACACTACC	960
	GGCAATATCA ACACGTATTG GATGTTGTTG ATACATTGCA CGCAATGTAT TaAACATTAA	1020
	TTTATATCCA GGTGCTCTT GaTACATTTT TATTTCTTCT GCAATAATAC CTTTTTCTTT	1080
40	ATCAACAGTT TCTTTTGTA AATAAGGCGT TTCaACCATT GTAAGTAAAC GTTTAATGTT	1140
	GTTTTCAATA TtATCAGTTG CACTGAACAA GTAGCTTGTA CGATCAAAGC TTGtAAACGC	1200
45	ATTTGCTTGT GCGTTATCTT CAGCAAACGC AGTAAATAAG cTTCTTCTTC TTTTCAAAAT	1260
	AATTTATGTT CcTAAAAAGT GAGCAACTCC ATCAGGTACA GTAACAAATT GGTCTTGTCC	1320
	AAGGGGTTTG AATTGATTAT CTAATGAACC AAATTGTGTA GTGTAAGTGA CAAATGTCTT	1380
50	TTGAAAACCT GGTTkGGGGA TAATAAATAA TCGTAAACCA TTTTCTAATt CTTGTTCGAA	1440
	tACTCTTTTCG TCTATTAATT CATAATAACG CTCTTTCATT ATTTATCCCC TCCTTTTGTC	1500
	AACACATAGA TtGTATCTAA AAATGCTTTT TCAGCAACAG AAACAATATC TTCGCGACTT	1560

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TTATGCATAA TCTCTATAAT ACTTTTCGGA CGATCTTCAG ATTCATATCG ATGAGAAATG 1680  
 ATTACTTTTT TAGCTAACTC TAATTTTTCT TCAGTGAAAT CTCCTGCTTT TATTTTTTCA 1740  
 5 AATTCACCTTA TAATAGTGTC TTTTGCAGTT TCGTACTTAT CACTTGAAAC CCCACTCAAA 1800  
 ACAATAAAT AGCCATTTTT GCCATCAATT TGTGAATGTA TAGAGTACGC TAAACTTTGC 1860  
 10 TTTTCTCGCA CTTCAATTA TAAACAGAT GAAGGATCTC CTCCAAACAT CATGTTAAAT 1920  
 ACAACAAAGG CAGCATATCC ACTTTGTCCA TATTGTGTTG GAAAACGGTA TCCCATATTT 1980  
 AATTTAGCTT GATCCACGTC ATCATATTCA ACAATATAAT CAACTTCTTC ATCGTGTAAT 2040  
 15 TGATGAGTAG AATGTTGGAA TTGATGTTTA TCGAATGGTT TAAGTGCAA TTTTTCACGT 2100  
 ATTTGTTTCT CAACACTTTC AGGTTCTACA TTGCCGACAA CATAAACAGA ACATTGATCA 2160  
 TTATTAATCA TTGATTGATA TGTATGATAT AGTGTTCAG CAGTAATATG TGGGATTTGT 2220  
 20 TCTAGTTGTC CTGTAGATA GTATTATAT GCTTCATTTT CAAACATATG GTCGAGTAAT 2280  
 TTTAAAACG AATATTGTGC TTTATTATCT ACCATTGCTT CTATTTTTTT GGCTAATAAT 2340  
 GTTTTCTCTT GGTAAACAAA ATTATCATTG AATGCTTTAT TTTCAATTAA TGGATTCCAA 2400  
 25 ATGATTTCTT GtAATAAATC TAATCCTTga TTAAATAATG AwTCACCGkT TCyTAAATAA 2460  
 CGkkCaTTAA caATTyCTAA tGaAAATGtA ATgACaTGCT GaTCTTTGAA TTTTGAAATT 2520  
 30 GTACTATTCA CATACGCACC ATATAAATCG GCTA 2554

(2) INFORMATION FOR SEQ ID NO: 566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1424 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 566:

TnTCGCTATT TtnAATTGGT TTTGTATGGT TTAAGTTATA TCAATATACA ACAnACCCTA 60  
 45 AAGCTGATAT CCCAGGTATC ATTTTtagTA CGATTGGTTT TGGTGCTTTG TTATATGGTT 120  
 TCTCAGAAGC TGGCAACAAA GGTGGGGTT CAGTAGAGAT AGAAACAATG TTTGCGATTG 180  
 GTATTATCTT TATTATTCTA TTCGTTATTA GAGAATTAAG AATGAAATCA CCAATGTTGA 240  
 50 ATTTAGAAGT ATTGAAATTC CCaACATTTA CATTAAACAAC AATTATTAAT ATGGTTGTAA 300  
 TGTTAAGTTT ATATGGTGGT ATGATTTTAT TACCGATTTA TTTACAAAAT TTACGCGGAT 360  
 55 TcTCAGCATT AGATTCCGGA TTGTTATTAT TACCTGGTTC TCTAATTATG GGTCTACTAG 420



TTGCTGTAAT GACTTATGCA ACATGGGAAT TAACTAAATT AAATATGGAT ACACCATATA 540  
 TGACAATCAT GGGTATCTAT GTACTTCGTT CATTTGGTAT GGCATTTATA ATGATGCCAA 600  
 5 TGGTAACTGC AGCTATTAAT GCGTTACCGG GACGACTTGC CTCTCATGGT AATGCTTTCT 660  
 TAAATACGAT GCGTCAATTA GCAGGCTCTA TAGGTACAGC AATCTTAGTT ACTGTAATGA 720  
 CAACACAAAC TACACAACAC TTATCAGCTT TTGGGGAAGA GTTAGATAAA ACGAATCCTG 780  
 10 TTGTACAAGA TCATATGCGT GAATTAGCAT CACAATATGG CGGACAAGAA GGCACAATGA 840  
 AAGTGTTACT ACAATTTGTA AATAAACTAG CAACGGTTGA AGGTATTAAT GATGCATTTA 900  
 TAGTTGCAAC GATATTTAGC ATCATCGCCT TAATTTTATG TTTATTTTTA CAAAGTAATA 960  
 AAAAAGCAAA AGCTACAGCT CAAAAGTTAG ATGCAGATAA TAGTATCAAT CATGAATAAA 1020  
 TAAAATAAAT TAATTGAAGT GTGACTAATC AAAAATTATG TTGTGGGGAC ATGATTTTTA 1080  
 20 AAGTATCGGT GCCAAATATG GTTATCGATA CTTTTTTTAT TTGTTGATTT ATAGAATGTT 1140  
 AGAGGAATTA TATTAAAATT TGGCATTGAC GTAGTAGGTC ATTAATAAAG AAAAAGCAGG 1200  
 AAGTGGGTCA ACGAAATGAA TTTTGTGAAA ATAACATTTC TGTCCCAATC CCTACTATAT 1260  
 25 AACATTATTT TAAACGAGGC ATGCGATTAC GGAAGAATAA GCTTATAACA AGTAAACCGA 1320  
 TGCTACAGCC AAGTAAAATG ATGCCGTTAT GAATAGCGTC ACTTgCTGTA ATCACTTGAT 1380  
 CTGGTGGTAC ATTTAAATAA TATTTTTTGA AAACATCTGC AATT 1424  
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## (2) INFORMATION FOR SEQ ID NO: 567:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 676 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 567:

TCTCCCATGT TCTGCTAAAT GACGCATCAC TTTACTTCA TGAGGCGTCA ATACACGTCC 60  
 TTCACCAGCA TTCAAACCGA CAACATTTAA AGGCCCATAT TCAATACGAG ACAGTTTCGT 120  
 45 CACTTGATGA CCAAAATGTT CGAACATTCT TCTGACTTGG CGATTACGAC CTTCTGTAAT 180  
 TGTAATTTCA ACCAATGTTG TGTTTTTATC TTTATCTTGT TTCTTAACTT TCACTTCAGC 240  
 50 CGGTTGCGTC ATACCATCTT CTAATTCAAT ACCTTTTTCT AGCGCTTTCA CTTCTTCTCT 300  
 CATTAAATAA CCTTTTAATT TCGCAACATA TTTTTTCTTA ATTTGATATC TTGGATGTGT 360  
 CATTAAATTA GTAAATTCAC CATCATTTGT GAGTAATAAC AATCCAGAAG TATCATAGTC 420  
 55

ACGTCCTCTA TCATCAGATA CACTTGTKAT CACTTGAGTT GGkTTATGGA AkAAAATGka 540  
 AAtTTTGTCT TCTAGTTCTA TTTTAATACC TTCAACTTCA ATCGTATCTG ATGGCTTCAC 600  
 5 TTTTGTTCCCT AATTCAGTGA CAGTCGTACC ATTCACTTTC ACTTTTCCTT CAGAAATTAA 660  
 AGTTTCTGCC TTACGT 676

(2) INFORMATION FOR SEQ ID NO: 568:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 568:

20 GAAACGGTTC TACCAAAAAA CAGTAAGGGC TAAACCCAAT CATGGTAAGA CAAAAAGTAC 60  
 AAATAGCCAT GCCCAAGTTG AACTCGCTGT ACGCCTATTT CTTTCTAAAA AGATAATAAT 120  
 AAAAGCCAAT ACTAAATTAA TGATGAATCC AATGGCTAAA ATAATAGTAA ATAACGTTCC 180  
 25 TAAATCGTTT GAAAATGTAA ATCGCATAGT CTTTCTCCT ATAAGAAAAG GCACAAAAAA 240  
 ACATTTTGCA CCTTTCACGT CATATTATTT ATTCACAGAT AAAGTTAAAA TTGcATTGAA 300  
 TTCTTCTTCA TTATTTGGGA ATGTTCTTTC TTCTATTTCT TTAATAGTAA TATTTACTAA 360  
 30 TTTTAAATTT GTAGCTTCTT CAGAACTTAA AAAAGCATTAA ATGTTTTTTT CTAATAACTC 420  
 KAAAGTCTCA GCTGtAAAaG TTTTAAGTTT AATT 454

(2) INFORMATION FOR SEQ ID NO: 569:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 894 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 569:

45 ACGATATTAC CACCCTCTGA AATAACATCA ATCATGTGAT CTGTAAAGTC CCAAGGATGA 60  
 CTTGTTGTGA AACGAACTCT TGAATCGCT ATTTTAGAAA TTGCTTGTA AAGATCTCCT 120  
 50 AAGTCATATT CTATATCCTG TAAATCTTTA CCATAAGAAT TTACATTTTG ACCTAAAAGC 180  
 GTTATTTCTT TGTAACCTTC ACGAGCAAGT TCACGTACTT CATCTATAAT GTCTTCAGGT 240  
 CTACGGCTTC GTTCTTTACC TCTTGTAAT GGAACAATAC AATATGTACA AAACTTATCA 300

TCAATAACGT CTCCTTCTTT AGACCATACT TCAACAACCA TTGCTTTAGA TAAGTATGCT 420  
 TCTTCTAAAA TTTCTGGTAA ATGATGAATA TTATGTGTAC CAAATATCAT ATCTACATTT 480  
 5 TGATACGATT TTAAAATTTT ATTCACTACT GACTCTTCTT GTGACATACA ACCACAAACA 540  
 CCGATTAAAA TATCAGGTCG TTCTTTTTTC AAATrCTTCA AATTACCTAT TTCACTAAAC 600  
 ACTTTGTTCT CGGCATTTTC TCTAATCGCA CATGTATTAA TTAAAATAAC ATCTGCAGTG 660  
 10 TTAATATCAG TCGTkGCTTG aTAGCCTAAT GCyTcmAGTA TACCAGCAAT GACCTCAGTG 720  
 TCATGTGCAT TCATTTGACA TCCATATGTT TTAATTAAAA ATGTACGCTC GTTCCCCATA 780  
 15 CCGCGATATT TTyCATCAAT TtGGgAAATC nCTATTATAA CGAACTTCTk GTtTACCnCC 840  
 TTTTTTnCGC TCCTTTAAAA TTAAGGCGGC TGATAAACAG GTCCAAAATA TTAC 894

## (2) INFORMATION FOR SEQ ID NO: 570:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 570:

TATCAATCCC ACAGCACATG CTGAACAAGA TCAACATGG GAGAAGATTA AAGAACGCGG 60  
 TGAACCTAGA GTGGGTCTTT CTGCAGATTA TGCACCAATG GAATTTGAGC ATACAGTTAA 120  
 TGGTAAGACT GAGTATGCAG GTGTAGATAT TGATTTAGCT AAAAAAATTG CGAAAGATAA 180  
 35 TAATTTAAAA TTAAAAATCG TCAATATGTC ATTTGATAGT TTGTTAGGAG CTCTTAAAC 240  
 TGGAAAAATT GATATTATTA TTTCCGGAAT GACTTCAACG CCTGAACGTA AGAAGCAAGT 300  
 TGATTTTTCA GATTCATATA TGATGACTAA AAATATCATG CTTGTAAAGA AAGATAAAGT 360  
 40 TAATGAATAT AAAGATATcm AAGACTTTAA TAATAAAanA GTnGGGGCAC AAAGGGACTG 420  
 AACCAGAAAA AATCGCTCAA C 441

## (2) INFORMATION FOR SEQ ID NO: 571:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1205 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 571:

AAGTCGTTCA TCTTTTTCTA CAAGGGTGTA AAAATAATCA ATCATATCGT ATAACGCTTC 120  
 TTTACCAATG ATGTCATATG GTGTTGTTGT CATTTAATCA CCCATTTTCA AAAATTTACT 180  
 5 GTTACGAACT TAAGTTAATA TATAACTAAT ATAACATGAT TTTAAACATT TGAAAGAAAT 240  
 ATGCATATTT GCCAATTTAA TTTATATTGT TTGAAAGTGT TTCTTTTTTC TTGAAAAAAC 300  
 10 GTTGAACCTT ATTTAAAGGT tGATGATGTT CGAGGTTTAG TTCGTTtAAT AAAGATtGGA 360  
 ACTTTTGTAAC ACCTTGATTA TAGTCTTTAA CTTCGAACTC TAACTCATAA TCCGTAGTAT 420  
 CGAAATACTC ACTTTTATCT AAAACCAGTA AATCACCTTT ATATTTAGTT TCTTGGCGAT 480  
 15 ATGTCGTTAA TGCACCAAGT ATTGATAAAG TTGTATCTTT TACACCAAAC TGTTCAACTA 540  
 TAATTTGACG AATGTCATCT GGAAGATTGT CGTTTGAAAT AATCAAGTTC ATCTCTGGTT 600  
 TAATGTCGAC GATATAGTTG TATTCTAATA GACCAACCTT TGCTGGTGTC TTTAAAGTCA 660  
 20 TTTCATATTG ATTGTCTTTA ACTCTTATGC GTAGTGCAGA GCGATGTTCC TTTAATTGTA 720  
 AATCGGGTGT ATCAATATAG TAATTGACTT GCTTAmAAAG CACACTGTCT TTAAATATT 780  
 25 TCTCTTGCAA TTTATTATAG ATTGAAGCAG TTATCATTTG TtTAAATTCT AttTCATGAT 840  
 TTGTTGCCAT GATATGTATA CACCTCGTAT CAAATTCAAT TTATCTTAAC TATATTATGA 900  
 ATGACAAAGT TGAATTTTAA AAGTAATTC CTTTATCTAT TATCAATGTT AATTTGACCA 960  
 30 TTA AAAATAG TGTTGTAAG TGTTTGTAT TATTGaATTG TGTTAAAATG TTATGGAATA 1020  
 AGAGGAGGAT TAAGCATGsG TTTWTATATT AATGAAATTA AAATTAAAGA TGACATACTT 1080  
 TATTGTTATA CAGAAGATTC TATTAAAGGA TTATCTGAAG TAGGACAAAT GCTCGTTGAT 1140  
 35 AGTGATAATT ATGCCTTTGC GTATACATTA GATGATGGTA AAGCGTATGC TTATCTCATT 1200  
 TTCGT 1205

## (2) INFORMATION FOR SEQ ID NO: 572:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 572:

50 TGAAGAAATA GCAATGATGA AATGCCGTAT GTTATATGAG ACGGGGTCAT TTCTTGAATT 60  
 AAGAGAAGAA ACAATTGTCT TATTGAAAAC TGGCATACAA CAATATGATG CATTGATGAT 120  
 TTATTACGTG AAAAGTTTGA TTGGTTTGGG ACAATATTTT GAAGCGGTAG AAGTAATTCA 180  
 55

ATTTGCTAAG TCAAAATTAA TTGAAGATGA AAAACGATTG ACTCAGTCAT TAGCTGATTT 300  
 TGrTACGTTA TCAATGAGGG AACAGACGCA CTTGATTTTG AAGTTAATAG ACAATGGTCA 360  
 5 TTTTCAATTT CAAGAAACGG TATTATATAT ATkAAaAyCT AATaCGTACa GTtATAACCT 420  
 CATTAGTTTA ATGATTGAGT ATTTAAGGTT CGCAAATTGT ACACAAGAAC TGACAATTGA 480  
 10 AAAGTATGGT ATGGATGTAA CTTTTGTACC AGCTAATTTA AAAGGGCTAG AACATACAAC 540  
 ACTTAAAGAA AAAGTTATAC CTAACGTTAT 570

(2) INFORMATION FOR SEQ ID NO: 573:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 939 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 573:

GTTGAATGGT TAGCAGCTGC AGTTGTATTA TATTTCTGTG GTGTAATTGT TGACGCTCAT 60  
 25 GTATCATTCA TGTCTTTTAT TGCAATATTT ATCATTGCTG CATTATCAGG TTTAGTCAGC 120  
 TTTATTCCCTG GTGGTTTCGG CGCTTTCGAT TTAGTTGTAT TACTAGGATT TAAAACTTTA 180  
 30 GGTGTCCCTG AGGAAAAAGT ATTATTAATG CTACTTCTAT ATCGTTTTCG GTACTATTTT 240  
 GTACCGGTAA TTATTGCATT AATTTTATCA TCATTTGAAT TTGGTACATC AGCTAAGAAG 300  
 TACATTGAGG GATCTAAATA CTTTATTCTT GCTAAAGATG TTACGTCATT TTTAATGTCT 360  
 35 TATCAAAAGG ATATTATTGC TAAAATTCCA TCATTATCAT TAGCAATTTT AGTATTCTTT 420  
 ACAAGTATGA TCTTTTTTGT AAATAACTTA ACGATTGtKT ACGATGCTTT tATATGATGG 480  
 AAATCACTTA ACGTATTATA TTCTATtGGC AATTCATACT AGTGCTTGTT TATTACTTTT 540  
 40 ACTGAATGTA GTTGGTATTT ATAAGCAAAG TAGACGTGCC ATTATCTTTG CTATGATTTT 600  
 AATTTTATTA ATCACAGTGG CGACATTCTT CACTTACGCT TCATATATTT TAATAACATG 660  
 45 GTTAGCTATT ATTTTGTTC TGCTTATTGT AGCTTTCGGT AGAGCGAATA GGTGAAACG 720  
 CCCAGTAAGA ATGAGAAATA TAGTTGCAAT GCTTTTATTC AGTTTATTTA TTTTATATGT 780  
 TAACCATATA TTTaTTGCTG GAACGTTATA TGCATTAGAT ATTTATACGA TTGAAATGCA 840  
 50 TACATCTGTA TTGCGCTATT ACTTCTGGCT TACGATTTTA ATCATCGCTA TCATCATAGG 900  
 TATGATTGCA TGGTTGTTTG ATTATCAATT TAGCAAAGT 939

(2) INFORMATION FOR SEQ ID NO: 574:

(A) LENGTH: 1059 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 574:

10	GAATTAATTA AATATTACAC ACAGCCTCAT TTTTCATTTT CAAATAAATG GCTATATCAA	60
	TATGATAATG GAAACATTTA TGTTGAACTT AnGAGATATT CATGGTCAGC ACATATATCT	120
	TTATGGGGCG CTGAAaGTyG GGGAAATATT AATCAGTTAA AAGATCGTTA CGTAGATGTG	180
15	TTTGGAATAA AAGACAAAGA TACTGATCAG TTATGGTGGT CTTATAGAGA GACATTTACA	240
	GGTGGCGTTA CACCAGCCGC AAAACCTTCT GATAAAACTT ATAATCTTTT TGTGCAATAC	300
	AAAGATAAAC TACAAACGAT TATTGGTGCG CATAAAATAT ACCAAGGCAA TAAACCAGTA	360
20	TTAACATTGA AAGAAATCGA TTTCCGTGCA CGAGAAGCGT TAATAAAAAA TAAATATTA	420
	TATAACGAAA ATCGTAATAA AGGTAAGCTT AAGATCACCG GTGGCGGTAA TAACTACACT	480
25	ATTGATTTAA GCAAAGATT ACATTCAGAT CTAGCAAATG TTTATGTTAA AAATCCTAAT	540
	AAAATAACTG TTGACGTCCT CTTTGATTAG TATATGAAGG TGACTTATAC TTCATGCACT	600
	TTAATTCCAA ATCAGATTAT TTAAATGATA ATTTTTAAAG TGTATGATGT ATATAATAGG	660
30	TAAAATTTTC TATATATTTA AATGGAATTG GGAGTAGGAA TGTGACAGAA ATAGTATTTT	720
	ATAAAATTTA TTCtTGTCAC TCCCCAACTT GCACATTATT GTAAGCTGAC TTTCCGCCAG	780
	CTTCTATGTT GGGGCCCCGC CAACTTGCAT TGTCTGTAGA aTTTCTTTTT GAAATTCTCT	840
35	ATGTTGGGGC CCCGCCTATA ATTGAAAAAT GCTTGTTACA TGGGCATTTT CATTCGGTCA	900
	ACTACTACCA ATATAATATT GtAGaGCCTA AGACATTGAT TTATTATGTC TTAGGCTCTA	960
	TTCTTCATT TAATGATTAA nTTATTATAG CAATACTTTA TTGTCCCATG ATTAGTGTTT	1020
40	TTTTAATGAG ACATAGTAAC TATAAAGTTT AATAATCGT	1059

## (2) INFORMATION FOR SEQ ID NO: 575:

45

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 575:

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GTTTGCTTTA GGTCTGTTT CATATTTATA CTTCAAGGA TTTACCTTTT TGaAGTCTGG	60
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TTCAACTkGC TTTTATTCT TTTGAAATC AGCTGGTTGA GTAGTTATGA GTTCATTATT 180  
 TTTATTAGmA TAAATCTTAC CATTAAACATA TTTATAATCT TTTGTTATAA AGTCACCATT 240  
 5 TCTGAATGGA ACTACTTGAT TATGACCTTT AGAGAATAAA TCAGTACCGA ACATTAAATA 300  
 GTTCTTCGTA TCTATACCAG CCAAATGTAA AATTGTTGGC ATTACATCGA CTTGACCAGC 360  
 10 ATATTCATTA TTGATACCAC CAGATTTACC AGGGATTTTA ATCCAGAAAC CAGTTCTGTT 420  
 TAAATCTGTA AATTTAGCCG GTGTGATTTT TTCACCTAAT AGTTMTTCCA TGGCATTGTT 480  
 ATGGTTTTCA GAGATACCAT AGTGGTCACC ATAAATCATA ATCACTGAAT TGTCATATAA 540  
 15 TCCTTTTTTC TTCAAGTCAT TAATATATTC TTCT 574

## (2) INFORMATION FOR SEQ ID NO: 576:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 796 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 576:

CAATGTTTTA TAGTACAATA TATTTThAAT AATACTCGTT AAGGAGAATG ATATGATATC 60  
 AATTCACGCA ATTTGACAG GAAAAATCCA AGATTTGCCT TATAGCTCGA AAAGACCGAT 120  
 30 GCGCTCTGCT TTAGATAAAA CTAAGATTTT ACAAACAACA TGGTTATCTT CAACTGGTTT 180  
 CACTGGTGAT GAACAGGCTT ATAAAGATCA TGGTGGACCA CATAAAGCAG TTTGTGGGTT 240  
 35 TAGTAAGCAT AATTATGCAC TGTATCAAGA TGATTTACCT ACACTACCTA CTCATGCGAT 300  
 GTTTGGAGAG AATTTAACAT TTGATTATTT AGACGAATCT GATGTTTACT TTGGTAATCA 360  
 ATATCGTTTA GGTGAAGCGT TAATTGAGGT TTCTGAAATT AGAGAACCAT ACTGGAAAAT 420  
 40 TCAAGCAAAA TATAATATTC CTGATTTAGT GAAGCGCATG TCTACATCTG GTAAAACAGG 480  
 TTTCTATTTT CGGGTATTAA AACAAGGCTA TGTATCTCCA AATGATCAGC TTTACTTAAT 540  
 ACAAGAAGCA CCAATCGAAC ATCGTTTATC TGTACAACAG CTTAATGACC TTTATTATAA 600  
 45 TGATAGACAA AATCAAGaTA TGTTACGATA TGCATAAAC AATCCATTTT TGTCACCAAC 660  
 AAGACGCGAT AACTTTCAAA AAATGTATAA CAGAACATTG GAAATAATTA CCTTTCATTh 720  
 50 ATAAGTGTTA AATGAACCTT TCAAAACaNa AAGGAATCAA CTTACACAT CGTTTGTATG 780  
 AATAGTCTTA TCTATA 796

## (2) INFORMATION FOR SEQ ID NO: 577:

(A) LENGTH: 1095 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 577:

10	AGAAATTATG ACAAATATA AAGATGGAAA GTTAGTTTAT GCATCAGTCG AACCAGGATC	60
	TTACGTAATA CATAAAGATG ATGCAATTAA ATATGACGAT TATTCTAAGT TAAAAAATT	120
	AAGTCAGCTA ACTAACTTG ATCATCCAAA ACCAGTTCCA TATAGCGTaC TCAAATCAAA	180
15	TCTTTCGGAG TACCTTTAAC AAGCGTTTCA TTTATGACAC ATGGATCAAA GGATACTAAA	240
	GATGAAGTGT TGCCGGCATT GGCCTATTTT ACTTTTTTCAC CAAAAAATTA TGAAGACAAG	300
	TCTAATCCAG ATCCAAAAGT TTAAATTTA GTACATATGG ATTTCTTAAA TGCATCTAGT	360
20	GATTTTGGTA ACGCACATTT TGTGTGTTTA AGTAAATATA TTAAAGAGTA TGAATCAAAC	420
	TATGAAACAG CGTCAGATGA TTCTTTAAAA TAGTATTTTAC TGTGTGAAAA ATAAATAGTG	480
25	TACTACATTA AATAATCGCA ATAATAATCC CGATAAACAA TCAGCATTAC TGCTTATCAC	540
	ATAGAGTTTC TAATAACTAT AACTCTATGA TTCGCAAATA ATAAATGATT GTCATCGGGA	600
	TTTATTTTTTA TCAATTTATA AAGTGACATT ACCTTGTTCA TCAGCAGGTT TGAAAACAGT	660
30	AATCACTGCA CTAATAATTG CTAAAATGTG TGGGATACCT GTCCAACAGA ATATTAAGTG	720
	TAGAATACCT TGCATATTCT TGCCGGCATA AAATTTATGA ATACCAAAAC TACCTAAGAA	780
	CAATGCTAAT AAAATATATA TAACTTTGTT TACTTGCAAT TCTTTCCTC CAGTTGAATT	840
35	GCTTATAATG ACATTAGCTT CTCTTTTTAT TATACCCACT TTTAGTTCAA ACATTCTAGT	900
	TTAAGCATT CCAATCATCT AAATTTTCAGT TATTCAATCC TTACAATAAA TTTAGGATTA	960
	CATTTTCAGTT GCATTGTATT ATTTTACGTG TGAAATATAC GTAATGAATC ACATGACAAy	1020
40	CTyCAAATTG AAAAATATAC ATTCTATGAT GTAAGGTCGC ATTTTAAATA TATTTACGTh	1080
	AAAATAGTTT GGATG	1095

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## (2) INFORMATION FOR SEQ ID NO: 578:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 489 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 578:

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ACTGCCAAAA TAATCATAGC CATGTTCTAC AGCTGCTTTC GCTACAATAT CCAAACGCAT 120  
 TTCAAAACAA GCGGTACAAC GTAAGCCGCC TTCTTTTTC TCAAGCTAATT CTTTATCCTT 180  
 5 CACCATTTTC ACAAACTTAT GTGGTTCATA AGGTGCTTCA ATATACTTCA CATTTCGCACC 240  
 AGTCTTGCGA TTAAAATCTT CCACAAATTG TTCTTGCACT TTAGCACGTC GTAAGTACTC 300  
 ATTTTTCGGA TGAATATTTG AATTCGCGAA ATAAATTGCA ATGTCTGCAT ATTGTGTAA 360  
 10 AAACCTCTAAT GTATATGTAC TACAAGGTGC ACAACAATA TGCAATAAGa TTTTAGGTCT 420  
 GATTGCTTCT CTTTCCCACT GsCCGATTAA TnTCTTCAAC ACCTTGTCCA TAATTAATTT 480  
 15 GTnGATTTn 489

## (2) INFORMATION FOR SEQ ID NO: 579:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1287 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 579:

CGTACTGCAT CATTGTGTTGA AAAATTTGCA AACTTCTTCA AGATGTTATG GCTTAGACTT 60  
 AAAGCGATGA AGCACTACAA AGCCTTAAAT AAAGAATCTA AGAAGCAAGA ATTTGAAAT 120  
 30 TCATTCAAAG ATGTTCAAAA AATTATGCGT ATTGTGAATC ACAATATTAT TTTACGCTTA 180  
 AAAGAAGAAC AAAATAGTAC AAATGTACTT GAGGTTAGCT TAGTCATTAA TCATTACTAT 240  
 35 GATATGAGTC GCTCATTAAA GTGGCGTGCA CAACGTCGAA AAGAACGTCA AGAAAACAGC 300  
 AATCAAATCA TACCGCAAGC TATGTTCCAT AACCACAAAT TGGAAGCATT GTACTTACAA 360  
 CGTCATCTTT TAGATGAATT AATTCGCAA AATAAAATCA ACAATATCGT TGCAGCTCAA 420  
 40 ATTCGAGAAA ATATCAATTa CAACGAAATT GTCTTGTCTT TACAGTCCAA ACATTaAGCA 480  
 AGaCwTaCaw TmCCCCCGTA CATATGAGAC AAAGTCATTA TCATCTCATA TGTACGGGGT 540  
 TTTTATATTC AACATCAAAA AATCAGATTG ATGAAAAGTA AATAACCTTT CATCAATCCG 600  
 45 ATTTGATTAT AGAATCTATT TTTTAAGTTT AAATGGAATT GTACATACGT TAACATTCTT 660  
 TTGATAAATT AAATACAATT TCATACGCAA ACTAGTTTGA TTGTGTAATA AATTATGCCA 720  
 50 ACGTTTCTTA GTAATAAATT CTGGTATCAC TACTGTAATC ATATAGTTTT GATCGTTGGC 780  
 TTTACGATTA ATCTTATCGA TAAAACGTGA AATTGGTCGT ATAATACTGC GATATTCCGA 840  
 ATGTAAATA ACTAATCTTA CATCTGGGAA ATGACGTTTC CATTTCTCTT GGAATGCTTT 900

TGCCTAATAA ATAGACTTAT CAACTGCTGT TGTAATACTT GTTATCGGCA CAATTGCTAA 1020  
 ATTACGATCT ACCACGTCCA CATTAAGAAC ATCAATGTCA GAACGTAATT GTTCTGCGAT 1080  
 5 ATCTCGATAA TGKTTGkTAA TTTTCAAGAA GAAATCACC ACGAACGGCA AGAAAAATAAG 1140  
 TATCGGCCAT ACTTGGCTAA ATTTAGTTAT GAGTAAAATC cATAAnAACA ATAAATGTCA 1200  
 10 CGATACCACC AAGTAAGTTC ACAGACAACT TACTTAACCA ATTCTTAGGA CGTTCATGAA 1260  
 TCCATTTAAT AACCATACCG AATTGTG 1287

## (2) INFORMATION FOR SEQ ID NO: 580:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 580:

GCCTCCTTTC CTATATCCAT GGGTGTCTTA GTTGGGAATG GCTTATTCCC TATCCCAAAC 60  
 25 ATCTGTCAAT TCAAGACTAT CACTGTATAC TAAATCGCCT nTCTATACnT CCATnCATTT 120  
 CATTTTCCAG TTGGAACAAT TTGTTTAATT ATTTTAAATA TCATTATCAA TCCAGAAGTA 180  
 30 TTTACTATTTC ACTTTTACAA TAATCAATCA TTTAACTACA CATGGGTTAGT CGGTGGTTTG 240  
 CTGGGGGTTA GCTTTTTTAAC TGGCAATTTA TTGTTATTGC CAAAATTAGG TGCAACATTA 300  
 ACTGTAATTG CAACAGTTGC GGGTCAAATT ATTATGGGTG TCATTATTGA TACATTTGGA 360  
 35 TTATTTGGCG CTACAATTCA TGATTTTAAT TTAATTAAAG CAATTGGAGT ATTGTTACTC 420  
 ATTGTCGGCA TCGTCATAAT GAATCAATTT AACAAGAATA ATTTATTACT AACTGATCAA 480  
 AAGTATTTAC TGTTTTGGCT TCTATTAGGA TTTATTTTGT GTTCTTTCC ACCTATTCAA 540  
 40 ACGACAATTA ATAGTGCTTT AGCTAGTCAT ACTCATTAC CAGCCTTTGC ATCATTAGTA 600  
 TCATTTACAA TTGGGTCAAT AGCGCTATTG ATTTTAACCG CTATTTTTAA TCGTTCTTTA 660  
 AAACATAAAA CAAGTCATTT AAAATTCGGT AAATTAAAGC CTATCTATTT TACTGGCGGT 720  
 45 ATACTTGGCA TGGCTTTTGT AACAGCTAAC ATTATCTTAA TGCCTCATAT GGGTGCAGCA 780  
 TTAACAACAC TTATTGGGAT GTTTGGCCAG ATTCTAATGG GCATATTGAT AGATCACTTT 840  
 50 GGATTATTTG GTTCACCTAA AATAGCAATG ACATCCAGAA AAACATTGG TCTATTATGT 900  
 ATTTTGACAG GCATTATACT TTTAAGATTA TTTTAAATTA ACTTTTAGCT TATCATTTTA 960  
 ACTTGTAATT ATTTTAAAAA GTGATAAGCT ATTTTTTTGT GGTCTAAAAA TCTTTAGAAA 1020

CAACTCATTTC TTAAGACCTA AATTAATGTT ATnTTTTAAT AATTTACACC AAATTAATAG 1140  
 CAAAAATTAT GTTATTCGTG CTAATATTTT ATAGTTGGTT ATTCAATTAA TTAAAAATAA 1200  
 5 GTCAAAATGC ACAACTTTTT ATn 1223

(2) INFORMATION FOR SEQ ID NO: 581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 581:

CACCTTTTTA TCATGCTTAG TTATCAATAA ATCTATATTT TGCTGTTTTA CAATTTTTTTT 60  
 20 AACTTTATCA ATCTCATTAT CTTGGACTAA ATAAATATAT GATCTTG CAT CTGTTGCTAG 120  
 AGCTTGTTTCG TGTTTTTCTG ATAAACATA TGTGATGGAA GCGTGAATAA TAATGCCTAA 180  
 TGTAAACAAA CTGATAATTA ATATACTGCT TATCAATAAC ATTAAGCGGT GGTGAAACTT 240  
 25 CATCATTGTT CTTTAGGTCT TTCCAATTTA TAGCCTAAGC CACGCACAGT TTTAATAAGT 300  
 TGTGGCTTCT TAGGATTATC TTCTAATTTA TCTCTTAAAT GACTGATATG TACATCAACA 360  
 ATTCTTGAGT CTCCTGCAA TTCATAATTC CATACCGTAT TTAACATATG CTCTCTCGTA 420  
 30 ATGACTCTGC CTTGTCTTTC TATCAAATAA AGCA 454

(2) INFORMATION FOR SEQ ID NO: 582:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 582:

TTTATAAGAT TTTATTTACA AATAATTGGT TTTCATATGT ATAAACACTT TTGACTTTCA 60  
 45 AATCTTAACG ATAATTCTAT TACAATACAA TCCCCTATTA GAATGATTTA TGTAATAAAA 120  
 AAAGCGGAGT TTCCCCCAGC TTTTCTAAAC GACTACATAA AATATAAGAT TGCAATTAAA 180  
 TGCAATAGTG ATGCTATTAC AATAAAAAATA TGCCAAATCA TATGAAAATA TGGTCTATTC 240  
 50 TTTTGTGCAT AAAACCATGC ACCAATTGTA TAAGACACAC CACCTAAGAA AATGAATAAT 300  
 ATGAATATCC ATGATGTGCG AATAAAAAATA ATTGGTAACA AGATAATACC TACCCAGCCC 360

AAAATCCCCC AAAGTGTCTG TCCCCATAAT AA

452

(2) INFORMATION FOR SEQ ID NO: 583:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1472 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 583:

15	CGCTTTTTGC AATAAGTCAT TAGCCGCTTT TAAGCCTTCT TCTTTTCGAT CTACAACAAG	60
	TAAAATAAAT GGCTTTAACG CTTCTTCTTT TTCACCTTCA AGCATATCTG GTTTTTGAAC	120
	CATTTCAAAT GGAGATTTCA ATCCATTATT ATCGCTCATT TCAATAATTG CATCATACTG	180
20	TGCTTGTGAC ATACTTGCAA TAGCCTGTTT TGCATTTTCT TGAAGGAAAT ATAAGTTTTT	240
	CAATTTAGGA TGCTTATTTA ATGTACTTAA TGTAATCGGT GTAATGTCTT TCTCATAAGA	300
	CACTTCAATC ACTGTACTAT TTGTTCTACC AGGAATTGGT GGTTTTTTCAT GAATATGCTT	360
25	TGATACTTCT CCAATTCCAA CGACAGATTG ATTTTTCGTT CGATTATAAA AAATAATATT	420
	GTCGCCTTCT TCTAACTGAG TATAAAAATG ATAACCATTG CGTTTAATAC CGTTGTACGT	480
	GTGCGTATAA ATCGTATATT GGTTCACAGG TTCAAATTCT TCAGTTTCAG CTAATAAGAA	540
30	ATAACGCGGT ATCTTAATTT CGCCTTTACC AAGACCACTT ATTAAATCAA ACTCTTCTGC	600
	AGTGATTTGA TTGAACAATG TCTCTTTCAT ATnACTTATA CGAAATTCCA AAGCTTCACT	660
35	ACGCTTTTAA TAATCTGCTG TTAATGGTTT CAATTGTTCA TTAAACGAA ACTGTACACG	720
	TATTTTATTT TGTGCACCTG TTTCAACACT AATAATTTCA CCACATCCAA GTAGTCCAGT	780
	ATCCGTCTGA ACTTGATAAA AGATGACTTG ATCTCCTACT TTAGCCTTTT TAAACGCTCT	840
40	AAATCCTTGA GATGGGTTAA AATGTGCGCC TGATTCAAAT AAAGCTGTTT GTCCTACTAA	900
	CGGTTCAATTA TGATTCCAAC GGTATATATCC ACAATTCAAC CAAAAATAAT TCGTTTCTGC	960
	TGTCATCTTA ATACTCCTTA ACCTGAATAA ATTTTAGAAA CACTATGAAT TACATTCTTT	1020
45	TAGTGTCTTCT TATGCAGTTG GACGCGTATG CGAACAACCTG TATACCCTTT GTTCACTGCG	1080
	ATTTTAATCG CATTTCTTAT AACATTGTAG CGCCAGGAC ATTAATTTTAC GTCCAGACC	1140
50	CTTATCGTTT TCACTTCTAA GTAAGTCGAA CTATTTTGCT TTACAACAAG TGCGACTCTA	1200
	AATACAGTTG GACACACATA CGAGCAACTG TATACCTTTT AATCAGTTTT CTATATTTTA	1260
	TTTATTATAT CTGTCTTAAT GATAAAAATT GTTACAAACA GTTTAACATA TTTAGCTACC	1320

ATGATACCAC TATGCTTGCh TATCTCTATA GCGCCATTGA TACACATTTT TAAATATCTA 1440  
TACTGCCGTT AGAATTTTAT CATGTCThAA TT 1472

(2) INFORMATION FOR SEQ ID NO: 584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 787 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 584:

GGTAGTGAAT GGGGTTCAAG ACAACAGTAT TGGAAGTACG AATGAATCAC AGTTTTTTAGG 60  
AAATTATATT GTAATTAAGC ACGCAGAAAA TGAGTATAGC TTAATAGCTC ATTTACACCA 120  
ATATTCAATC ATTGTGAATG AGGGGCAAAA TGTAAATAT GGTGATATCA TTGGGAAGGT 180  
TGGGAATTCT GGCAATTCTA CTGAACCTCA TATACATTTT CAAGTAATGA ATGATAAGAA 240  
TATTGAAGCA TGTACATCTT TAAAAATTCG ATTTATAAAT AATCGAGAAC TTATCAAAGG 300  
GGATGTGGTC TGCGGATTAC AAGCTGAATG ATGGCGATAC TTATAAAATC TCGACACTAT 360  
AAAAATGGTA TAGTGTGAG ATTTTCTTGC TTATTTAGTT AATCAAAGT GCACGCCGGA 420  
TTCATTAGAA GTCGACGTAT TTTTGTGTTGT AATAGAGTAA CCGGTCATTG AAATTTTAGA 480  
TTCAATATCT GAAGCGGAAT TTGTAGATTC AGGATTATAG AAGCTACATT CATAAGTGTT 540  
ATCATCTTTC TTTTAAAGTA TAAACATACC TTTGGCTTTA ACTTCGACTT TAGTGTTGTT 600  
AATGTCAAAA GTTTGAGTGC TATTACTATA ATTAACACCA GCCCAAACCG ATTCATTATC 660  
TTTCACAACG GGAAGTCAT CTTCTTGCTT AACGACGThA CTTCATCTTT CTCTGTCTTA 720  
AAGACATCTT TAGATAAGCC TGGATACAAC ACATATCCAT ATTTATTGTC AGAATTAGAA 780  
TGCTTTT 787

(2) INFORMATION FOR SEQ ID NO: 585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 585:

ATGCTAAATT AGGGGGAATA TTTACGATAA AGAGACCAGA AAAATAATAA AACACATGCT 60

TAAAATGAAG ACTATTTTTT ATTACAAGAA AATGTATCTA GTAAACTTAA AGTAGCAAGA 180  
 CCTAATAAAT TTAATGCATG TTGTGCACCT TTTTACCTT GGCCAGCTTC GAAATGTTTG 240  
 5 TAAGCAGCTA CACTTAAAT GCCTATCGTT GATAGTGATG CAAGGCGAGA AATGTTTTTA 300  
 TTGATAAAGC TAGCTGAGTA TAAAGCAGCA GTAGTTGCTT CTGCAATGCC GACGTATTTT 360  
 10 ACAAGTTCTT TTTGCAAGCC AAAAGTATGT TCAAACAGTT CAATCATACC CTTATCTTCT 420  
 TGCAATTTAG GTTTACTGGC TTGGTATAGC TCTTTCGCAA GTTTTAAATT CGTTGCGTAA 480  
 CGCAAAATCA TATTTAATTC CTCCAATAT TTGATTTTTT GTGAAAGATG ATTACTTTAT 540  
 15 CATTTTTACC CGTTTCTATA AAAATGAATC AATTATGTAA CGTATGTGTA GTTTAGGAAT 600  
 GTTTGCTATG GAAATATAAT TCTGTTCACT CAAAATGTAT GAAATTAATG TGTAGTTTTG 660  
 TCGAGTTGCT CTTTAAATTT GGTTAGATTG TTTTTAGAG AAGCGGTACT ATTTTAAAGT 720  
 20 GCATCAACAG ATTTACCTTC GTTTTGAGAC ATTGAGTTTA TTACAGCACG AAGTTCTGTT 780  
 TCTAGTATGT CaGCGTCGCT TTAGCATTAG AACTTAaTAt TTAtAcTCTT 830

(2) INFORMATION FOR SEQ ID NO: 586:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 586:

35 TTAGGACGTT TTTACAATCA GTACAATGAG CTCATTGTTA TTAGTCCTTT AACGGCGTCT 60  
 TTTAATGCTG GCGCTACATT TGGGCGATTT CATCATTTAA TTGATACTGA AACTTTAGCA 120  
 AAATTAGAAC ATGAAAAAGG ACATTATTAT CAGAAGATGA TATGTGATGA CAATGTAGAA 180  
 40 ATGATTTCTA TAAATAACAT ACCGAAATAT CCGAGAAATC ATAATGTATT AACTAATCAT 240  
 GACTCATACG AATATTCATT GAATTTAGGA AGTAGTAATA GTTATTCAAA GTATGAGCTT 300  
 ACCTTAGATG ATATTTATGT TGGTGCTACC TTTtAACAAA TTATATTTAT ATTCTAGCCm 360  
 45 ACtAAATAAA AGGGkaCtaT TTGaATCaAA CmATaTGtAT TAACCTTTTT TA 412

(2) INFORMATION FOR SEQ ID NO: 587:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 4709 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 587:

	TTCAGTTTGA AATTAATCAT ATAAATTTCT TATGGGAGGG TTGATATCTT AATGATTAAC	60
5	ATTATTTTCAG CTATAGGATC TATTGGAACA TTTATTATGG CTTTATTTTA TTTTGTATCA	120
	GTTTCAGTTC AACTTTATCA AATGAAAATT AGCTTTCTGC CAGCTTTAGG TTTTAACCAA	180
	ATTTTATTAG AAAGGGAGGA GGATCAACTT AATATAATGA ATTCGGCAAC AGAAGAGCAT	240
10	CATCATAAAG ATTATATTAA ACTATATAAT TTAGGTGGCG GTGCTGCTAA TAAAATTGCA	300
	ATAGAGGTTT TATTGGGGAA GGATrAGTC ATTCAGAAAA AATACGTGCA TATTkTACCT	360
15	AGTAAAGAAG GGTACATGTT ACCAATTAAT AAAAATGTGT ACGAAGAATT AGAAAGAACG	420
	ATTGAsAACA ATGGTCATGA AGCTGATTTG AATGTACGTA TGACTIONTA TCATAATGTA	480
	AGTCGCAAAC AACAGGAAGT TATATTAAAA GGTCAAATCG ACCGTTTTAA TACTTATAAT	540
20	AATAAGAAA TTTATGATTT GCAGTTTATC TAAAAATTGA TTTAAGAGGG TAGTTGTTTA	600
	TTGCGAAAAA TATCATTCAA TTTTAATGAA ATAATGGCGT CATTACTATA AAATATTACT	660
	TTATGTTGTA ATGCATTTTT CTATAAGATA GAACTAAAAG GAGGGGCAAA GATGCAAATT	720
25	AGACAAATAC ATCAACATGA CTTTGCTCAA GTGGACCACT TAATTAGAAC GGCATTTGAA	780
	AATAGTGAAC ATGGTTATGG TAATGAATCA GAGCTAGTAG ACCAAATTCG TCTAAGTGAT	840
	ACGTATGACA ATACCTTAGA ATTAGTAGCT GTTCTTCAAA ATGAAGTTGT AGGGCACGGT	900
30	TTACTAAGTG AAGTTTATCT TGATAACGAG GCACAACGGG AAATTGGATT AGTGTTAGCA	960
	CCTGTATCTG TTGATATTCA TCATCAAAAT AAAGGTATTG GGAAGCGATT GATTCAAGCA	1020
35	TTAGAACGAG AAGCAATATT AAAAGGATAT AATTTTATCA GTGTATTAGG ATGGCCGACG	1080
	TATTATGCCA ATCTAGGATA TCAACGCGCA AGTATGTACG ACATTTATCC ACCATATGAT	1140
	GGTATACCAG ACGAAGCGTT TTTAATTAAA GAATTAAAAG TGAACAGTTT AGCGGGAAAA	1200
40	ACAGGTACCA TAAATTACAC ATCTGCTTTT GAAAAAATAT GATTTCAAGC TAGGATTACA	1260
	TTAGGTAGAG TTCATATTAA TAATAAAAAA TGTTTGCAAT CAAATCGTAC GTTGTCGTTT	1320
	GTAATTCTTA AAATAGCAAT AAATAAAATG TTTGTTAGTA AAGTATTATT GTGGATAATA	1380
45	AAATATCGAT ACAAATTAAT TGCTATAATG CAaTTTTAGT GTATAATTCC ATTGACAGAG	1440
	ATTAAATATA TCTTTAAAGG GTATATAGTT AATATAAAAT GACTTTTTAA AAAGAGGGAA	1500
50	TAAAATGAAT ATGAAGAAAA AAGAAAAACA CGCAATTCGG AAAAAATCGA TTGGCGTGCC	1560
	TTCAGTGCTT GTAGGTACGT TAATCGGTTT TGGACTACTC AGCAGTAAAG AAGCAGATGC	1620
55	AAGTGAAAAT AGTGTTACGC AATCTGATAG CGCAAGTAAC GAAAGCAAAA GTAATGATTC	1680

	GTCAAACACT	AATAATGGCG	AAACGAGTGT	GGCGCAAAAT	CCAGCACAAC	AGGAAACGAC	1800
	ACAATCATCA	TCAACAAATG	CAACTACGGA	AGAAACGCCG	GTAAGTGGTG	AAGCTACTAC	1860
5	TACGACAACG	AATCAAGCTA	ATACACCGGC	AACAACTCAA	TCAAGCAATA	CAAATGCGGA	1920
	GGAATTAGTG	AATCAAACAA	GTAATGAAAC	GACTTCTAAT	GATACTAATA	CAGTATCATC	1980
10	TGTAAATTCA	CCTCAAAATT	CTACAAATGC	GGAAAATGTT	TCAACAACGC	AAGATACTTC	2040
	AACTGAAGCA	ACACCTTCAA	ACAATGAATC	AGCTCCACAG	AGTACAGATG	CAAGTAATAA	2100
	AGATGTAGTT	AATCAAGCGG	TTAATACAAG	TGCGCCTAGA	ATGAGAGCAT	TTAGTTTAGC	2160
15	GGCAGTAGCT	GCAGATGCAC	CGGTAGCTGG	CACAGATATT	ACGAATCAGT	TGACGAATGT	2220
	GACAGTTGGT	ATTGACTCTG	GTACGACTGT	GTATCCGCAC	CAAGCAGGTT	ATGTCAAAC	2280
	GAATTATGGT	TTTTTCAGTG	CTAATTCTGC	TGTTAAAGGT	GACACATTCA	AAATAACTGT	2340
20	ACCTAAAGAA	TTAAACTTAA	ATGGTGTAAC	TTCAACTGCT	AAAGTGCCAC	CAATTATGGC	2400
	TGGAGATCAA	GTATTGGCAA	ATGGTGTAAT	CGATAGTGAT	GGTAATGTTA	TTTATACATT	2460
	TACAGACTAT	GTAAATACTA	AAGATGATGT	AAAAGCAACT	TTGACCATGC	CCGCTTATAT	2520
25	TGACCCTGAA	AATGTTAAAA	AGACAGGTAA	TGTGACATTG	GCTACTGGCA	TAGGTAGTAC	2580
	AACAGCAAAC	AAAACAGTAT	TAGTAGATTA	TGAAAAATAT	GGTAAGTTTT	ATAACTTATC	2640
	TATTAAAGGT	ACAATTGACC	AAATCGATAA	AACAAATAAT	ACGTATCGTC	AGACAATTTA	2700
30	TGTCAATCCA	AGTGGAGATA	ACGTTATTGC	GCCGGTTTTA	ACAGGTAATT	TAAAACCAAA	2760
	TACGGATAGT	AATGCATTAA	TAGATCAGCA	AAATACAAGT	ATTAAAGTAT	ATAAAGTAGA	2820
35	TAATGCAGCT	GATTTATCTG	AAAGTTACTT	TGTGAATCCA	GAAAACTTTG	AGGATGTCAC	2880
	TAATAGTGTG	AATATTACAT	TCCCAAATCC	AAATCAATAT	AAAGTAGAGT	TTAATACGCC	2940
	TGATGATCAA	ATTACAACAC	CGTATATAGT	AGTTGTTAAT	GGTCATATTG	ATCCGAATAG	3000
40	CAAAGGTGAT	TTAGCTTTAC	GTTCAACTTT	ATATGGGTAT	AACTCGAATA	TAATTTGGCG	3060
	CTCTATGTCA	TGGGACAACG	AAGTAGCATT	TAATAACGGA	TCAGGTTCTG	GTGACGGTAT	3120
	CGATAAACCA	GTTGTTCCCTG	AACAACCTGA	TGAGCCTGGT	GAAATTGAAC	CAATTCCAGA	3180
45	GGATTCAGAT	TCTGACCCAG	GTTTCAGATTC	TGGCAGCGAT	TCTAATTCAG	ATAGCGGTTC	3240
	AGATTCGGGT	AGTGATTCTA	CATCAGATAG	TGGTTCAGAT	TCAGCGAGTG	ATTCAGATTC	3300
50	AGCAAGTGAT	TCAGACTCAG	CGAGTGATTC	AGATTCAGCA	AGCGATTCCG	ACTCAGCGAG	3360
	CGATTCCGAC	TCAGACAATG	ACTCGGATTC	AGATAGCGAT	TCTGACTCAG	ACAGTGACTC	3420
	AGATTCCGAC	AGTGACTCAG	ATTCAGATAG	CGATTCTGAC	TCAGACAGTG	ACTCGGATTC	3480
55							



CGATTCTGAC TCCGACAGTG ATTCCGACTC AGACAGCGAT TCAGATTCCG ACAGTGATTTC 3600  
 CGACTCAGAT AGCGATTCCG ACTCAGATAG CGACTCAGAT TCAGACAGCG ATTCAGATTTC 3660  
 5 AGACAGCGAT TCAGATTCAG ATAGCGATTTC AGATTCCGAC AGTGACTCAG ATTCCGACAG 3720  
 TGA CTCCGAT TCAGATAGCG ATTCAGATTTC CGACAGTGAC TCAGATTCCG ACAGTGACTC 3780  
 AGACTCAGAC AGTGATTCCG ATTCAGCGAG TGATTCCGAT TCAGATAGTG ATTCCGACTC 3840  
 10 CGACAGTGAC TCGGATTTCAG ATAGCGACTC AGACTCCGAT AGCGACTCCG ATTCAGATAG 3900  
 CGATTCCGAC TCAGATAGCG ATTCAGAATC AGACAGCGAT TCAGATTCAG ACAGCGACTC 3960  
 AGACAGTGAC TCAGATTCAG ATAGTGACTC GGATTTCAGCG AGTGATTTCAG ACTCAGGTAG 4020  
 15 TGA CTCCGAT TCATCAAGTG ATTCCGACTC AGAAAGTGAT TCAAATAGCG ATTCCGAGTC 4080  
 AGTTTCTAAC AATAATGTAG TTCCGCCTAA TTCACCTAAA AATGGTACTA ATGCTTCTAA 4140  
 20 TAAAAATGAG GCTAAAGATA GTAAAGAACC ATTACCAGAT ACAGGTTCTG AAGATGAAGC 4200  
 AAATACGTCA CTAATTTGGG GATTATTAGC ATCAATAGGT TCATTACTAC TTTTCAGAAG 4260  
 AAAAAAGAA AATAAAGATA AGAAATAAGT AATAATGATA TTAAATTAAT CATATGATTTC 4320  
 25 ATGAAGnAAc rCCTTAAAAG GTGGCTTTTT TACTTGGATT TTCCAAATAT ATTGTTTGAA 4380  
 TATAATTAAT AATTAATTCA TCAACAGTTA ATTATTTTAA AAAGGTAGAT GTTATATAAT 4440  
 TTGGCTTGGC GAAAAAATAG GGTGTAAGGT AGGTTGTAA TTAGGGAAAA TTAAGGAGAA 4500  
 30 AATACAGTTG AAAAATAAAT TGCTAGTTTT ATCATTGGGA GCATTATGTG TATCACAAAT 4560  
 TTGGGAAAGT AATCGTGCGA GTGCAGTGGT TTCTGGGGAG AAGAATCCAT ATGTATCTAG 4620  
 TCGTTGAAAC TGA CTAATAA TAAAAATAAA TCTAGAACAG TAGAAGAGTA TAAGAAAAGA 4680  
 35 TTGGATGATT TCAATATGGT CnTTCCCA 4709

## (2) INFORMATION FOR SEQ ID NO: 588:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1554 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 588:

50 CTTTTTTAA tAwCgGaAtA TTGtCaTgaT tAcAcTTCgt TAGGGTTTAc gTCGtAATTT 60  
 CATTTaaTAA gCgCTTCACc ATTAAAtGTG gTAmCCTTTA ATTCGCCAGT AGAAACATCA 120  
 CAGTAACTAA GCGCAATTTc AGGTTGATTc ATAACAAAAC TTAAATATA GTTATTTTGT 180

55

CGTCTAACCA TACCTTTCGT TTGTTTCGGA TCTTCCATCT GTTCACAAAT AGCTACTTTA 300  
TATCCATTAT TAACAAGTGT ATCTATATAA CTATCTGCAG AATGATACGG AACACCACAC 360  
5 ATCGGAATTG GATTTTCTTT TTTAGCATCT CTTTtagTTA AAGTAATTTT AAGTAyACGT 420  
GATGCCTCCT TGGCATCTTC ATAAAACATT TCATAGAAAT CACCTAGTCT AAAAAATAAT 480  
AAGCAATCTT GGTATTCTGA TTTTATTTTT AAATATTGCT GCATCATTGG TGTAACATTA 540  
10 GACATATTAT TTCTTCACAA CCCTTGTCTC TTTTtAAAAT TTGTCTTTAC AATATATTCTG 600  
TTTGTAAGyT TTTTAATTAT TAATTATTTA ACTTATACAT TTTAACATAC TTACTTTTAC 660  
AAACCTATTc ATACCATATA ATCACGAAGC ATCTTAAATG TATAAGAAAA CGCCTCAAAC 720  
15 CTAATAAAAT GTGTCAATAG CATGTTTAgA ATTAAATTAA AATTCTAACA TTCAAGACAT 780  
TTAATTAAGT AAGGGCGTTC AATATTAAAA TGAACAATGA CTCTGTTTGA AATCATATAT 840  
20 CATAAAATTA TTTTATAAAC CTTTGAAGAA TACCACGTTT TTTTAGAGTA ATTAATAAGA 900  
AATAACTTAT AATAGATCCG ATAGCACTTG aGACTATGaA CGTAATCATT AACGGTTTTAA 960  
TGAAGAAGTC TTGAAGCCCA AGGaAATATG CTAATGGtAT aCaAATTAAA cTTCCgATGA 1020  
25 CaCCAGTTCC aAGTACTTCa CCGACCGCGG CCaTAAATAT ATGTTTACGA TATnygTAAA 1080  
ACATACTAGC CAATAAACT CCAATCATAC TACCCGGAAA TGCAAAAGst GTACCAGTAC 1140  
CAAAAAGAAC TCTTAAAATT GATGATATAA GCGCTTGAGC TAATCCATAC CAAGGACCTA 1200  
30 CTATGACCGC ACTTAATACA TTTACAAAAT GCTGTACTGG TGCTGCCTTA ACTGGTCCTA 1260  
GAGGAATGAT GATAAATCTG CTTAATACAA CATTTATTGC AATTAAAAAGT GCAGTTATAG 1320  
CCAGTTTTCT TGATTTcATA TGATTGTTCT CCTTTTTGTT TGTAATTAAT CACTATGCTT 1380  
35 GGCTTTATTA TGGTCATTTA AACGTGTTTC CATTGTTGAT ACAAACATTT TCAATAATTG 1440  
ATTcGCTTCA TATTGTGAAG TTTGAAACTG TTCAACTATG GGCAATGTAT TTATTTCTGC 1500  
40 TTCTAtACTC TGAATGGtAT GTTCCGACTG nTCCAGCGCA TTTGTTTCCC GnAA 1554

## (2) INFORMATION FOR SEQ ID NO: 589:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 638 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 589:

TTTTGACGAA AAAAGTTGAT TTACAAATAT ATAAACGTTG TGATTTCaAT GTTTGTATAG 60

TATATACATG ACAGCAACTT GGGAAAAAAA GGAAGGTAAC GAAGGTTTAT TAACTGTTAC 180  
 TGTTCCTGCA GAAAAAGTAA ACAAAGC<sub>r</sub>CT GAGAGATCCC CTCATAATTT CCCC<sub>AA</sub>AGCG 240  
 5 TAACCATGTG TGAATAAAATT TTGAGCTAGT AGGGTTGCAG CCACGAGTAA GTCTTCCCTT 300  
 GTTATTGTGT AGCCAGAATG CCGCAAAACT TCCATGCCTA AGCGAACTGT TGAGAGTACG 360  
 TTTCGATTTC TGA<sub>CT</sub>GTGTT AGCCTGGAAG TGCTTGTCCC AACCTTGTTT CTGAGCATGA 420  
 10 ACG<sub>s</sub>CCGCAA GCCAACATGT TAGTTGAAGC ATCAGGGCGA TTAGCAGCAT GmTATCAAAA 480  
 CGCTCTGAGC TGCTCGTTCG GCTATGGCGT AGGC<sub>c</sub>TAGTC CGTAG<sub>g</sub>CAGG ACTTTTCAAG 540  
 TCTCGGAAGG yTTCTTCAAT CTGCATTTCG TTCGAATAGA TATTAACAAG TTGTTTGGGT 600  
 15 GTTcGAATTk CAACArGTaA GTtAGtTGCT AGAnCCCA 638

## (2) INFORMATION FOR SEQ ID NO: 590:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 590:

AAAATATTCC CGTACATTTT GATGTCTGTA GGGGCTTTTT TGACTTTAGG ATTTGTCATT 60  
 30 TTTTCAATTC ATAAAGGGAG ACGAACGAAA AATGAATCAG CACGTAAAAG TAACATTTGA 120  
 TTTTACTAAT TATAATTACG GCACATATGA CTTAGCAGTA CCAGCATATT TACCGATAAA 180  
 AAAC<sub>TT</sub>TAATA GCTTTAGTAT TGGATAGTTT GGACATTTCA ATATTTGATG TCAATACACA 240  
 35 AATTAAAGTG ATGACGAAAG GTCAATTACT TGTGAAAAT GATCGACTCA TTGATTATCA 300  
 AATCGCTGAT GGAGATATTT TGAAGTTACT ATAGGAGGGA AAATAGATGG TTAAAAATCA 360  
 40 TAACCCTAAA AATGAAATGC aAGATATGTT AACGCCTTTA GATGCTGAAG AAGCAGCTAA 420  
 AACAAAATTA CGCTTAGATA TGAGAGAGAT TCCTAAGTCT TCAATTAAAC CAGAACATTT 480  
 TCATTTAATG TACTTATTAG AACAAACATTC TCCATATTTT ATAGATGCTG AATTAACTGA 540  
 45 ACTACGTGAC aGTTTCCaAA TACATtATGA CATTAATGAc AATCATAACAC CTTTtGATAA 600  
 TATTAAATCA TTTACTAAAA ATGAAAAATT ACGTTACTTA CTCAATATCA AAAATTTAGA 660  
 AGAAgTAAAT CGTACACGCT ACACATTTGT GTTGGCACCA GATGAATTAT TTTTCACAAG 720  
 50 AGATGGATTA CCCATTGCTA AAACAAGAGG GTTACAAAAT GTTGTGATC CATTACCTGT 780  
 GTCAGAAGCT GAATTTTTAA CAAGATATAA AGCGCTGGTT ATCTGTGCAT TCAATGAGAA 840

AACTAAAGTT ATTGAAGCGG CAACGTTAGA TTTACTAACG GCATTTTTTAG ATGAACAGTA 960  
 TCAGAAACAA GAACAAGATT ATAGTCAAAA TTATGCATAT GTACGCAAAG TAGGACATAC 1020  
 CGTTTTCAAA TGGGTGCTA TCGGTATGAC AACGTTAAGT GTTTTATTAA TTGCATTCTT 1080  
 AGCCTTTTTTA TATTTTTTCAG TAATGAAGCA TAATGAGCGC ATTGAAAAAG GATACCAAGC 1140  
 ATTTGTAAAG GATGtTATAC GCAAGTACTA AATACGTATG ATGATTTAGA TGGTaAAAAA 1200  
 TgaTAAAGAG GCACTTTACA TTTATGCCAA AAGTTATATC CA 1242

## (2) INFORMATION FOR SEQ ID NO: 591:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 744 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 591:

TTCCAGATAG AGCCTTAGTT GCTGCCGCTG AATTGTCTGA TCGTTACATC ACTGATCGTT 60  
 TTTTACCAG ATAAAGCGAT TGATTTAGTT GACCAAGCAT GTGCAACAAT TCGTACGGAA 120  
 ATGGGATCAA ATCCAAGTGA ATTGGATCAA GTTAATAGAC GTGTCATGCA ATTAGAAATT 180  
 GAAGAAAGCG CACTTAAAAA TGAATCTGAC AATGCGAGCA AACAGAGATT ACAAGAATA 240  
 CAAGAAGAGC TTGCCAATGA AAAAGAGAAA CAAGCAGCAC TTCAATCTCG TGTAGAATCA 300  
 GAAAAAGAAA AAATAGCAAA TTTACAAGAA AAACGTGCGC AACTAGATGA AAGTAGACAA 360  
 GCGTTGGAAG ATGCACAAAC AAATAACAAT TTAGAAAAAG CTGCTGAACT ACAATATGGA 420  
 ACAATTCCTC AATTGGAAAA AGAACTTAGA GAATTAGAGG ATAATTTCCA AGATGAGCAA 480  
 GGTGAAGATA CAGATCGAAT GATTCGTGAA GTTGTAACAG ACGAAGAAAT TGGCGATATT 540  
 GTCAGCCAAT GGACAGGCAT ACCAGTTTCA AAATTAGTTG AAACAGAACG TGAAAAATTA 600  
 CTTCACTTAA GTGACATCTT GCATAAACGT GTTGTAGGTC AAGATAAAGC GGTTGACCTG 660  
 GTTTCAGATG CAGTAGTTAG AGCAAGAGCA GGTATTAAAG TnCAAACAGA CCTATTGGTA 720  
 GTTTCTnATT CCTAGGTCCn ACTG 744

## (2) INFORMATION FOR SEQ ID NO: 592:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 592:

	TTGTTATAGT GTCTGAATCT GTGTAACCTCT TGCCCATGTG TTCTGAGTAA AGCACCCACT	60
5	GTTTATTTAC TTTTCGTTGT AGTCTAGCTT CGTGTAGTAG TTTGTTTAAAC TTTTGTGCTG	120
	ATATACCGTA GTCTGCCGCG ATTTGAGTTG TGGCTAATGT GCCAGTTGAT TTAAAGATTT	180
	CATCAACATA ATCTGCTTTG GGTTTTAGCT CTCCAATTC TTGTTGTAAA AGTAAGTTTT	240
10	GCTCTTTTTT TTTCTTATAC TCAGTCAACA CTGTAATGAT GTAGTCTGGA TCTTTTAATG	300
	TTTGTTCAAT TACATTGTCT GTTGCGTATA TACCGTGTTT GCGAATAGCT GGTaGGACAT	360
	CTGATGTTAC CCAGCGTTTG AATTTTCTAG CGGTTTCTCT AATTTTTTCG TTTTGTCTTT	420
15	GTTTAGAAGC ATCGAAGATT AGACTGTATA ATCCTGATTC GTTGATAATG ATCATATTTT	480
	TGTTTTGACC TGATGCACTA AATTGGTGCG TCAGTTTGTC CTCGCTATCA ACATGATTTT	540
20	TAATGGCATT GTCTGATCTT GCATATCCTA AAATCTCAGC AATATCTTTT CCTACAAAAT	600
	AAGGTTGCTT TTCAATTTCT ACTGTTCTTA CTGGTAGCTC TTTAAAATTA AATGTTTGTA	660
	ATGCTTGCAT TTGAGTATCC TCCTTTTTCC TCAACACCCA CATTGAGCAG ACGGTTATCG	720
25	CAATGACTAT CGAATGTATT TAAACGCGGC TCATATCATC GCCAGcTCTC GCTCACATCT	780
	GCTCAATGTG GATGTTGATA AGCGTGGTTA TATTAAGAAG TGAATGTTAC TGATTCACCT	840
	TCCGCCACTC TGTTAAATCA GTAACCTTGT TATCGCTTTC AACACCGTTA AGCTTGTCTA	900
30	ACGCTTTTAC TACTTTTTGG AACTCTTTGA TAGCACTtCG TAGCTTTTTA GTAATTTTAT	960
	CTTCTACCAT TTCCAAACCA GCAAATGCGT CTTGCTTATT CATGCTTAGA TGTTTGTTGA	1020
	AAAGATCTCG AGTGTATCTT ATTTCTTTAA GTGATTTATC ATAAGCTTCA ATTTGTCCCTG	1080
35	AAAGGTTATG ATATTTTAGT TGTAGTTTAA CTAATTTTAA TGATTGGTCT TGCATTTGTT	1140
	ATGTCTCCTT TAAGATGTTT GTTTGCGTTT CGTGTACTTT GTGGGTAAAA AAATATCTCC	1200
40	AATATTTTCG TCAAAAAAAT CAGCGATAAT AAACATCTCA TCATTCTTAA ATTGATGCTT	1260
	TCCTAATTCT TTTAAACGAT AACCTTCAGT TGATATATTC AAGAGGTTTG CTAAATCTTC	1320
	TTGAGTACAC TTTCTTTCTT TTCTCAACTT TATTAAATTC CATTGCATGT TGTACCTCC	1380
45	CGCTTTTACAA AACCTACTAT ACACGATACG GTACTTGnGT CAACATAAAA GTTTGCTTTT	1440
	CGTGTATTT	1449

## (2) INFORMATION FOR SEQ ID NO: 593:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1170 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 593:

5 ACCAAAAACA CTTTCTAAAG AAATTGTTTC AGAACCATTT GCTAAAAACC AATTACGTGA 60  
 AAAAGCTCGT CTAAC TAACA TTAAAGGTTT AGAGATTCCA AGAGTTTCAT AACTTTTAGA 120  
 CGATGATGAT TTCATTACAG ACGTAGAAAC AGCAAAAGAA TTAAAAGCAA AAGGTGATAC 180  
 10 AGTCAAGTTC ACTACTAATA AATTCAAAGT ATTTGCTGCA ATTTAGATA CTGTAATTCA 240  
 TGGATCAGAT GTAGATTTAG TAACTGGGT TGAAAACGCA CTACAATCAG GATTAGCAGC 300  
 TAAAGAGCGT AAAGATGCCT TAGCAGTAAG TCCTAAATCT GGATTAGAAC ACATGTCATT 360  
 15 TTATAATGGA TCTGTTAAAG AAGTTGArGG AGCAGACATG TATGATGCTA TTATTAACGC 420  
 TTTAGCAGAT TTACATGAAG ATTATCGTGA TAACGCAACA ATTTATATGC GATATGCAGA 480  
 20 TTATGTCAAA ATTATTAGTG TTCTTTCAAA TGGAACAACA AATTTCTTTG ACACACCAGC 540  
 AGAAAAAGTA TTTGGCAAAC CAGTAGTATT TACAGATGCA GCAGTTAAAC CTATTGTGGG 600  
 AGATTTCAAT TATTTTGGAA TTAACATGA TGGAACAAC TATGACACTG ATAAAGATGT 660  
 25 TAAAAAAGGC GAATATTTGT TTGTATTAAC AGCATGGTAT GATCAGCAAC GTACATTAGA 720  
 CAGTGCATTC AGAATTGCAA AAGCAAAAGA AAATACAGGt CCATTACCCA GCTAAGCCCC 780  
 AAAAGGTTAA TGTAACAGCT AAGGCTAAAT CAGCTGTAAT ATCAGCCGAA TAGGGGTGAT 840  
 30 GAAATGAGTT TAGAAGAAk TAAATTGTGG TTGAGAATTG ACTATAATTT CGAAAATGAT 900  
 TTAATTGAAG GTCTCATTCA ATCGGCTAAG TCTGAATTAC TATTAAGTGG GGTnCCAGAT 960  
 TATGACAAAG ATGACTTGGA ATACCCGCTT TTTTGTACAG CGATTAAATA TATCATTGCA 1020  
 35 AGAGATTATG AAAGTCGTGG ATACTCAAAT GACCAATCTA GAAGCAAGGT GTTTAATGAA 1080  
 AAAGGATTGC AAAAAATGAn TTTGAAATTA AAAAAAGTGGT AGGTGATTTT TAAATGGAAT 1140  
 40 TTAATGAATT TAAAGATCGC GCGTATnTTT 1170

## (2) INFORMATION FOR SEQ ID NO: 594:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 1393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 594:

55 TGAAGGGTGT TTTGTTTATG GCCAATTGCT GTGTTATTAA AnCGAATGTT TCGAATGGAA 60

ATCATTCCGG AAGAGGACAT GTCTTCAGCT TCTGATTGGA AAGCACAGTT TTATCGCGGT 180  
 ACTTTGCAGC GCTTTTACCA AtCnTTGCAC GCAGAAAAGC TTACACCTTA TGTTATGTCT 240  
 5 TATGACGATA TCATTTCAAT TTGTAAAGAA AACAATATCT CTGAAGTAGT GACTGCGGGT 300  
 GATATTATGA GTTATCATCT TGAAGAATAT GATATTTTAC ATCAACGTTT TTTATTCAAT 360  
 GAAGCACGCA TTGCCGTTAC TTTGATACGT GGAATCATT ACTTTAAAGC GAGTAAAACA 420  
 10 ATGAATCAAC AAGGGGAGCC ATACAATGTT TTTACTAGTT TCTATAAAAA ATGGCGACCT 480  
 TACTTGAGGC ATAGAGACGT ATATCACTAT GATTTAAAAT CATTGAAAA CTTTGTCAAT 540  
 GCATCACCTG ATGATTTAGT GTTTGATGAC ATAGCATTG GATCCTCACA aATAATTGAA 600  
 15 CAGatAAATG GCAACATTTT TTAGATCAAG ATATACAGAA TTACGAAAGC GGAAGAGACT 660  
 ATTTACCTGA AGTATTAACA AGTCAGCTAA GTGTTGCTTT AGCATATGGA TTATTAGATA 720  
 20 TTATTGAAAT TTTAATGAT TTATTGGCGC GTTATGATGA AGATGAGGCA AACTATGAAG 780  
 CATTTATACG TGAATCATT TTTAGAGAAT TTTATTATGT GTTAATGACA CAGTATCCTG 840  
 AAACCTCATA CCAAGCTTTC AAACCTAAAT ATCGACAGAT AAAATGGTCG CAAAATGAAG 900  
 25 CGGATTTTAA TGCATGGTGC GAAGGGCAAA CAGGATTTCC AATCATTGAT GCAGCAATAA 960  
 TGGAATTGAC ACAAATGGT TTTATGCATA ATCGAATGAG AATGGTTGTG TCGCAATTTT 1020  
 TAACCAAAGA TTTATTTATA GATTGGACAT GGGGAGAAAA ATTCTTTAGA AAGCACCTTA 1080  
 30 TTGACTATGA TGCAGCATCA AATATTCATG GATGGCAATG GTCTGCTTCT ACAGGTACGG 1140  
 ATGCAGTGCC GTATTTTAGA ATGTTTAAATC CAATAAGACA GAGTGAACGC TTTGATGCTA 1200  
 AAGCTTTGTA TATCAAAACA TATCTTCCGA TTTTAAATCA AATTGATGCA AAATATTTGC 1260  
 35 ATGATACACA ACGCAATGAG TCCAACCTTT TTGAACAGGG GATTGAATTA GGTAGTCATT 1320  
 ATCCAAGACA AATGGTAGAT CATCAAGAAA AACGTACACA AGTTTTAGCT ACATTTAAAG 1380  
 40 CGCTAGACTA ATT 1393

## (2) INFORMATION FOR SEQ ID NO: 595:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1484 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 595:

TTAACTTGAA AGATTTCCCC GACATCTATA ACTTGATATAA TGTGTATATG TCGTTTTTAG 60

AAAAATTAAA AAAAGAATAT CTTGATTGGT ATAATCAGAC CTTAGAGTTT TCTAATTTAT 180  
 CAAACAATGT AGTAAGWATA GATACTCCTT TTAAAGATAA TTCTTTAGAT AATTTAATAA 240  
 5 TTTACGCTTT ATACGATCAG TCCAGAGACA TGATTACACT GACAGATGAC GGCTATACTA 300  
 TATtTGATTT AGAAAATAAT GGTATTTCTT TAAATAAATC AAAAAAACGT AAAAAGATTT 360  
 TTGAAGAGCA CCTTTCAGCT TACGGTATTA AATATAACGA TAAAACTCAC GAAATTTTTG 420  
 10 TTCAAACATA CTTTAAAAAT TTTAATAAAT CGAAACATAA TTTATTACAG TGCCTTATAT 480  
 TTGTTAATGA TATGTACTTA CTTTcTAATC CTAAGTCACA GAACATATTT ACAGAAGATG 540  
 TTGCAAACAA ATTGGATGAA CATAACATTT ATTACGGAAG AGATTTACCT ATTATAGGAA 600  
 15 GCAGTGGTGT TGTTCAATAT TTCGACTTTT TTATTAGCGC TAAGAAAAAT CAAAAAGAAA 660  
 AATTTATCAA TGCTATTTCT AACCCTAATA ATTCTATGAT TATTAAGTCG AAAATAACGG 720  
 20 ATGCTATGCA AGCAAAAAAA ATAAAAAGAC ACAGGCAAAA TGAGTTTATT TTTATTTTAA 780  
 ATGACTCAA AAAAGAAATA AATGAACATA ATAAAAATCT TCTTCATGAA AACTATATTA 840  
 GTACAATAGA TTATAGCGAA TTAGATGAAA AGATAGGTTT ATTGATTTAA TATATATAGA 900  
 25 CGTGATAATA TCAATGTTTA TATTAAATGA AACGAATTTG AAAATTTTGA AACAGCTTAA 960  
 GATAGCAAAT TGAATAGCCT TATTGATAAT GCAGAATCGT CTACACTTAG TTGAACAAAT 1020  
 TCTATGAGAA TAGATATTGT TAACTATTT GGGTAGGCGA TTTTATTTTG ACAAGAGTCA 1080  
 30 GAAGATTATT TAGTTCATAG TTTAAGTTAC AAATGGCTAA ACTTTATGAA AATGGTATGA 1140  
 CTAGAATCGA AATTATACTC GAATACGATT TAACACTCTC AATCTTCTCG AACTGAATAA 1200  
 ATACTGGGTC ATTCAATCAT CAAGACAACT TAATAAGTGA TGATAAATGT TCATACCATT 1260  
 35 TTGCAAATAT AACCAGATAC TCTCAACAAA ATGTAGAGTT CAAAATTAAA AATGTCCCTA 1320  
 ATTGGCACAT TGCTGTATGA TAATAAATTC AACTTAGATT TCAACAATAT AACTAATGAT 1380  
 40 GCTTATATTT ACCGCGATAT CAAACCAAAC AGCCCATCCA CAAACAAATT AGAATATATC 1440  
 mTGTTAATAA TAGTAAATGA TATATCTTCC AAAGACCGCA AACT 1484

(2) INFORMATION FOR SEQ ID NO: 596:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1435 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 596:



CTTTATCaTT AAATGCCaTT TTGaATCCTT CTtGAATTtG TTTGATTtCC TTTTCAGTAT 120  
 TATTAACCTT GTTCAAGACA GTGCCATTAA TTTCTTCTT GAGTGGACCA ACCTCATCTT 180  
 5 TATTAGTTGA TTCATGAATC GTTAATCCAA TGTGTGGCTG TATTCTATAA CCATCATTcG 240  
 CTATAGTTGA AACATATTGT GaTAATTGTA ATGGTGTATA GGTATCATAT TGACCAATTG 300  
 ATAAATCTAG ATAATTACCT GGATTATTtG TTAATGGTtC GATTTGACCT CTtGTTtCAT 360  
 10 TTGGTAAATC TATCCCTGtT TTCACACCTA AGCCTACTTG ATTTAATCCT CTtCTTAGCT 420  
 TTTGGGCAGG TGAACtTATG TCTGAAGGTA AAGCCATACC AGAATAATAA GGGTCTCCCG 480  
 15 CTAATTTTAA TGCTGTTtTA AACATATATA CGTTTGATGA ATGCATCAAA GCTTGCTTAT 540  
 CATTAAAGT TACATGCCCG TTTTtATTGA AGTATGATCG TTTTGTCAAA CCACCTTGGA 600  
 AATGTAATGG TTCATCGACC ATTGTTTCTC CAACTTTGAT AGCTTTATTC TGATAACCGG 660  
 20 CTAATAATGT TCCACCTTTT ACAGAAGATC CAACCGCAAA TTGAGAAGTA AACGTACCAA 720  
 TGTcATAATC AGTCATTTTA CCACTCTTAT TAATCTGCTT TCCGGCAAGC GCAAGAATGT 780  
 CTCCATTTTt AGGATTTTGT ACAACCATCA TTGcATTATC CATATCTTTG GCACCTTGAC 840  
 25 TGCGAsTTCT TAATTTGTTT ATCTAATAAT GCTTCTACTT CTTTTTGAAG ATCTATATCG 900  
 ATCGTTAATT TCAATCTTG ACCGCGAGCG CCAGGrTTTA ACACtTCTGA AGATGTAACT 960  
 TTACCAGATT TGtCCGTTGT GTATTTCATT TCTTTCTTCT TACCACGcAA TACATCTTCA 1020  
 30 TATTGATATT CTAGGTAAGA TTTTCCAACA CGATCATtGC GTGAATATCC TTTGGATAAG 1080  
 TAATGTtCTG TCAATtCTTT TGGaATACCT TCAGCAGGTG TCGATACATC TCCGAATATA 1140  
 CCTCTTAAAG TATCGCCATA TGGATATTTT CTATCCCAAT CCATAGACGT GTTAACACCT 1200  
 35 GGTAATTtGG AAAGtTGCTG AGAAACTGCT GCATACTCTT TTTCACTGAC ATCTTCATTT 1260  
 TTTATCATTT GTGGATCTAA AACTGTTcCT GGCATTcATC TCTCGAAAAA TAGCTAAAAC 1320  
 40 TTGGTAAATC TTTAGAAGAC AATTCATCTA ATTGTGGATT TTCCGGATTT CGGATAACAG 1380  
 TTGGTnTATC CATAATGGAT CCTGGTTTAA TACCTTCCAn CnGGCGAACA TAGCC 1435

## (2) INFORMATION FOR SEQ ID NO: 597:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 516 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 597:

AGAAAAAGAT TTAGAAAAGA TTACCATTCTG CGACATAACA ACACGCGCTG ATATCAATAG 120  
 AGGGACATTT TACTTACATT ACGAGGATAA ATATATGTGA CTCGCAGATA TGGAAGATGA 180  
 5 GTATATTTCA GAACTAACGA CATATACTCA ATTTGATTTG TTACGCGGTT CTTCAATTGA 240  
 AGACATTGCG AATACTTTTG TAAATAATAT ACTCAAAAAT ATTTTCCAAC ATATTTCATGA 300  
 10 TAATTTAGAG TTTTATCATA CTATTTTACA ATTGGAACGC ACGAGTCAAT TAGAATTGAA 360  
 AATCAACGAA CATATTAAAA ATAATATGCA ACGTTACATT AGTATCAATC ATTCTATCGG 420  
 AGGCGTTCCA GAGATGTATT TTTACAGTTA CGTTTCCGGA GCAACAATTT CaATTAnnTA 480  
 15 AATACTGGGG TAATGGACAA ACAGCCCATT TTCAGT 516

## (2) INFORMATION FOR SEQ ID NO: 598:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1955 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 598:

AGTACTTTAC CATGAGGTAA GACTTTATTC CCTGCTTTTA TAGATTGTGC TTTTATTTGT 60  
 GTGCCAGAAC CAATAGtAct GGTcTAATGA TTTTGCACCTC ACATTATCAA TAGCTTTTTG 120  
 30 TTTGTCTTGA CCTTCAACAT CTGGCACTTT ACTATACTCT GCATTAGATG TGTCACTTTT 180  
 TGATTTACCT ACATTTAAAT ATTTCAAAGT ATTTTCCATT ATTGGTTTAA ACGCTTTACT 240  
 35 AACACCTAAT TCATAAGCTT CTTGGTCATT TTTTGTGACC AAGCTCATA CAGCGTATAC 300  
 AATAACTTTA GGATTTTTCT TCGGCGCGTC ACCCATAAAA CTTACAAAAT ATGGGTTTGG 360  
 ACCTTTAACG TATCCACCAC CATTAGGTGC AGCGACTTGT GCTGTACCAG TCTTACCTTC 420  
 40 GACCTCATAA CCATCAATAC GATAGTTTGC AGCGTGACTC TTCTTACTAT TCACAACTAA 480  
 ATCCAATTGC TTTTCAACTT TTTCAGCAGT ATCTTTTGTT ATTGGTTTGC CTGCGATTTG 540  
 TTTTGGCCCT TTATAAAATT GTCTTTTACT AACAGGATTT TCAACGCTAT TCACAAACCA 600  
 45 TGGTTTTAAC ATATTACCAT CATTAAAGAA CGCTGATTGC GCTTGTAACA TTTGAACAGG 660  
 TGTTACTGTT GTCGATTGAC CAAATGATGA CGTTTTTTGt TGCAACTCAT TACTCCATCC 720  
 AATTTGaCCA GGTGCTTCTC CATCAAACAT ACCTTTAGTT GaTTTTCCaA ATCCaAATCG 780  
 50 TTCATACCAA GATTTCAATTT TGTCTGCACC AACTAAATCT TGTAATGCA TCATCAATGT 840  
 ATTAGATGAA TAAGTAAATC CGAGTGACAT TGGGATTTCA CCCCACCGA CTCTATTCCA 900

AAAAGCACCT TCTTGAATAG CAGCTGCTAA CCCATATGAT TTAAATGTTG ATCCAGGCTC 1020  
 GTATGTGTTT TGATAAAGGT CATTTGCCCA CTTTTTACCA AAGTCTTTAC CAGTTTCAGG 1080  
 5 ATTAAATGTT GGTCGCTGAC TGTATGCTAA AATTTCTCCA GTTTTGGCAT CCATGACAAC 1140  
 CGCAAATAAA TCTTTCGGCT GGTATCTTTC AACCATGCCA TCTAAAGCTT CTTCAACAAA 1200  
 TACTTGAATA TTTGAATCGA TTGTTAAATG GACATCATCA CCACGTTTAG GCTGCTTCTC 1260  
 10 TTTTTTAGTA TTTGGTGCGA TATATCCCCA AATATCATGA ATATATCTCA ATGATCCTTT 1320  
 AGATCCACTT AAATAACTAT CAAAAATCTT TTCAACTCCA AGTGCACCTT TAAGTTCACC 1380  
 15 AGTATCCGGA TTTTCTGAG CTCTACCAAT TAAGTGTGAT GCAAAATTGC CATTGGATA 1440  
 AAAGCGTTCT GTTTCAGGCA ATAAAGAAAT ACCAGGCAAA TTCATTTTCT CTATTTTCAA 1500  
 TTTGTCCTGA TACGTTAAAT TTGTTCTTTT GCGTCCAAAT TCAATTGGA AAGCTTTCTT 1560  
 20 TTGACTAAGT CTCTTTTCAA TTTCTCTGG CTTCATATTA ATGACTGTAG ATAATTTCTT 1620  
 TGCAGTCTCT TTTTATCAA CTACATGCCT AGGTTTTTTA GAATTGGCAC TCGCCTTTTT 1680  
 ATCTATTACT GCAACAAGTT TATATCTTTC TACATCTTCT GCTAGCACTT TACCATKACG 1740  
 25 ATCATATATC TTTCTCGTT CTGGTTGTTG TGCATTCTTA ACTAAATACT TTTCATTGTC 1800  
 CTTCATGACT AAATCTTGAC CATTAGAATG TCCAGTAATC ATGATATATG AAATTCTTAA 1860  
 AACCAATATA AAAAAGAGCA GTCCGAATAA ACCAACAAGT AGGACTGCCC CTATTTTATT 1920  
 30 TTTTTTAATT TTAATTTTTT TGGTCGCCAT TACTA 1955

(2) INFORMATION FOR SEQ ID NO: 599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 704 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 599:

TAGCAAGAGT AGGTGATAAC AGTTCTTTTA ACGTGTTTGC TGCTTGCTCA TTTCTTGGCT 60  
 45 CATTGTAGAC TAAATATAA TAAGCGTTTT CAAATAAGTG CTTTTTAGCA TTTAGTACAC 120  
 CAGATTTATG ACTACCAGCC ATTGGATGAC CACTGACTAA ATGAATATTA TGCTTTAATA 180  
 AATTGCATTG GTGTTGCTGT ATCATTGCTT TAGTACTACC AGTATCAGAA ACAATAACAC 240  
 50 CAGGTTTAGT TGGCATATCT ATAAGCTCGC TAAGATATTT ATTTGTGATA GCAACAGGTG 300  
 TTGCATAAAT AATTACATCG GCTTTTTTAA TAGCTTCACT ATAATTTAAA CATTTTTCAT 360

TATTAGTATT AGGGTTATGG TATTTTATAT TGCTAGCAAG ACTTCCACCA ATTAATCCAA 480  
 GCCCAACAAA TAAAACTGTT GTCATATAAA TCACCTTATT TCGAAATTTT CAGAATAATA 540  
 5 ACATTGTAAA TGAGCTGTTG ACACAGTGCA ATAGTAAATA AAAATCGATA ATAGCATTAA 600  
 TAGATAAACG GAGATAAATC ATCTACAATA AAGAGTATAG TAACACAATG GCAACGGAGG 660  
 10 GGTAAATCAA TGGAACCAAT ATTAGAAATG ATtAAAACAT TAAC 704

(2) INFORMATION FOR SEQ ID NO: 600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 600:

CCTCTAAAGG ATCACGAACC TTTTTCATCG TGACTAAGCC TATAATACCC TTAAAcCTAT 60  
 TATTATTAAC TTTTACCTCT GTGTATTCCC TATCAATTAG GCGACGCCAG TGACGTTTAT 120  
 25 CTATATACTT TACTTTCACA GTCACCAACT CCTTGTCATT ATTATATAAA ACTACATAAA 180  
 TGATGTCATG TCATGATACA GTTTTATAGT TTTTGTTAAT CATATGAAAA TATTTATTAT 240  
 TATTTTACTA CAACTCGCTT CAATTTACTT AAAATAGACA ATATTAATTA GATAGTACAC 300  
 30 ACATTTCTTC ATAAAAGTGA TTTTTCAAAA ATATAAATAA CACACTCTTA TCGTTTTCAA 360  
 AATCATTTAA TGCTATTTTC ATTAAAAACA GCTGAAGCAT CAAATCTATT CTGATTCAAT 420  
 CAAGAATACA TATAAAATG AAGTGACTCA AAGGTTTATT AACAACTTC AAACCACTTC 480  
 35 ATTGATCACT TTTATTTTAA AGCATATTTT TCGATTACTG ATTTAAGATG CGGATATTGC 540  
 GTAATTAATT CAGATTGCTT AAACAATTCA AACTGCTTAA ACTCAAATGC CGGTTGACAC 600  
 40 ATACAACCTA CTAAACTAAA AGTATTTGAT ATTTGATTG AAGAAGCAAA AATTGTTCTT 660  
 TTAGGCACTA CATATTGCAA TACATCTCCA TTTTGGATAT CAGTACCCAA TGTTCAGTC 720  
 GTATATTCCC CATCCGGATT TATCATATGA ATTGTTAGAG AATCGCCAGC ATGATAGTAC 780  
 45 CATACTTCAT CAGCATCAAT TCGATGAAAA TCGGAAATAT TGTCATCTGT AAGTAAAAAA 840  
 TAAATACTAC TAAACGGGCG TCTGCGTCCA TCTTTCATA CTCTCGAAT TGTCTCTCTA 900  
 TAGAAACCAC CTTCAGGATG TGATTCAAGT TGCAATTcAT CaATCCATTG TTCTGCTGAT 960  
 50 TTCATTATTT CAAATCCACA TTATGGAATA CGTTTTGTAC ATCTTCTAAA TCTTCTAATG 1020  
 CATCGATTAA TTTTTCAAAT GTTACTTGGT CCGCTTCAGA AAGTTCAATA TCTGTTTGAG 1080

GAACGACTGC AAATTGAT

1158

## (2) INFORMATION FOR SEQ ID NO: 601:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 601:

5	TGATACTTAT TTTTCAATAT TATTTGGAAT AAATCTTtT AATTGTGGTG TGAAATAAAC	60
15	ACCGAAATTC TTTTCAGATT CATCTTTTcC ACTACCTGCA TATAAAATAC CAATCAGTyC	120
	ATGTTTAGAA TTCAATACAG GAGATCCTGA ATTACCTGGT TGTGCATACG CATCAAATTC	180
20	CATAAACGTT CCACTGATAT GGTTAATCGT TCCTGTCGAT TCAAACATTT TATATTTTGT	240
	TTGTGCACCC TTTGGATAAC CAATAACAGA AATTCTATCT TTCACTTTTG CTCCGTCTGC	300
	AAATTTTGTA TAACTAACGT TCTTATTAAA ATTCAAACCT TCTGTACTTG TTTCATGAAC	360
25	ATGAACTATC GCAAGGTCTT CTTTCCGGG ATATTCTACA ATGTCTTTAA CGTCGTAGTT	420
	TCCTCCGCCT TTACCTTTAC TCGAATGATG TGCTGATACT CTATTTTTAA AAATATCATT	480
	ACTTTTAGCG ATATGTTTGT TAGTTACGAT TGTATTTTTA CCAACAATA CACCAGTACC	540
30	ACCCACAAAT GCTACCACTG aATTGTATGG TTCCTTAGTT GCATCGGTAA TTTCTTTGAC	600
	ATTCTTTTCT GCTTTGGCAA TTGAATGArG CTGATTAGAA ATATTTTCAG CAAAACCAAG	660
	AGATGTTAAA ATAGTTAAAG CAGTTAAACC TTAAACCATT ACATTTTTAT TCATATTTTA	720
35	CCTCCTTCCA AATTTATTTT nATAGTTAAT GTATCTAGAT ACACATTTAC TATATACATT	780
	TTAAATAAAA ATATThATTA AATATTAATT AACCACCTAT nAACGTT	827

## (2) INFORMATION FOR SEQ ID NO: 602:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 796 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 602:

50	nGGnACGTAA AGTATTTATG TTAAATGGCA nAAATATATG AATGATGAGT TACCTGGATT	60
	ACCAATGTTC CAAGGTAAAT CGATAACTAT TGTTAACGAT AAAGTACGAA ACTTAGACAT	120

CGACGATTTT GTCGAGGTTT ACTTATATGG GGGGATGTTA TGAATAATGT ATTGTTAGAG 240  
 GTTAAAGATT TAGAAACATC ATTAAAAATA AATAATGAAT GGTTAGCAAC TGTTGAAAAT 300  
 5 ATTTCTTTTG AATTATCTAA AGGAGAAGTT TTGGGTATAG TAGGGGAATC TGGTTGCGGT 360  
 AAGTCCATAT TAAGTAAGTC AATTATTAAA TTATTACCAG AAAAGATATC TAAACTAAGT 420  
 10 AATGGAGAAG TTATATTTGA TGGTAAACGA ATCGATACGC TCAATGAGAA GCAATTGCTA 480  
 GATATTCGAG GAAATGATAT TGCTATGATT TTTCAAGAAC CTATGACTGC TTAAATCCT 540  
 GTATTTACCA TAAAAAATCA ACTTGTGGAA TCTATAAAAT CACATAAAAA AATTTCTAAA 600  
 15 AAAGAAGCAA ATAAATTAGC AAAAGATTTA CTAAAAAAG TTGGAATTGC TAGACAAGAT 660  
 GAAATATTAA ATAGCTATCC TCATCAATTA TCTGGTGGTA TGAGACAAAG AGTAATGATT 720  
 GCAATGGCCA TTTCATGTTT TCcTAAATTA TTAATTGCTG aTGAACCTAC AACAGCATTG 780  
 20 GATGTCACGA TTCAAG 796

## (2) INFORMATION FOR SEQ ID NO: 603:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1618 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 603:

GGATGTGTTT ATCCCAAATT GaAAcAgAa TTTATGATCA AAtGATGTGG ATTGGTTTTTA 60  
 35 AaCCATTCAa AATTaCCAAT ATTAmACAAG AATCTGAAGA CATTAAATCA TTTtACAGTT 120  
 GAAACTGAAG AATATGACTT TAGTGAATTT ACACCAGGCC AATACATCAC AGTTGATGTT 180  
 40 TCTAGTGATA AACTTCCATA TAGAGCTAAA CGTCACTATT CTATCGTATC AGGTGAAAAA 240  
 AACCATTTAA CTTTTGGCGT TAAACGTGAT GTCACAACAG AACATGAAGG CGAAGTTTCA 300  
 ACAATTTTAC ACGATGAGAT TAAAGAAGGC GATATGATTA ATTTAsTGCG CCTGTAGGTG 360  
 45 GATTCGTATT AGAGAATACG ACTGAACCAC AACTTTTCTT AGGTTcAGGT ATTGGTGTTA 420  
 CACCTTTAGT AGCTATGTAT GAAGCTGCCT CTGCCAAAGG TTTAGATACA CAGATGGTTC 480  
 AAGTTGCTGA AAATGAACAA CATTTACCTT TCAAAGACAA CTTCAACAGT ATCGCAAGCC 540  
 50 ATCATGACAA CGCTAAATTA TATACACACT TAnAgATAAA CAAGGCTATA TTGGTGCTGA 600  
 AGAATTACAA GTATTTTTAG CAAATAAACc TGAAATTTAT ATCTGTGGTG GTACAAAATT 660  
 55 CTTACAaTCT ATGATCGAAG CACTTAAATC TTTAAATTAC GATATGGATC GCGTACACTA 720

ATATGAAACT TAATCAACGT TACGTAAAAG TATTTGCATT ATATTTTCGTA AGTATTGTTA 840  
 CTGCAAATAT TATTGTTAAA AATAATAATT TAATTAAAAC AtTGATACAA ACCATAGCCG 900  
 5 GGTACACGGT CTTTGCAGTT GGTTTGAAGT ATTTAACTAA ACGTAAAAAT AAATGACATC 960  
 TATACCAAAA CAGCTATGAC TTTACTTTGT CATGGCTGTT TTTTAATTGG GAGTAGGACA 1020  
 10 GAGATGATAT TTTCGCAAAA TTTATTTGGT CGTCCCACCA CAACATGCAT TGATGTATGC 1080  
 TCACTGAATT TCATAAGAAA GGAGTTCACA AGATGACCGT AGATATTGGA CGGATTTATG 1140  
 ACAATAAAGA TAATACCGAC GCTATTTCGTA TCCTAGTCGA TAGAGTCTGG CCGAGAGGTA 1200  
 15 TTTCGAAAAG AACTGCTAAC CTAGATTATT GGTTAAAAGA CATTGCCCCT TCTACTGAGT 1260  
 TGGGACAATG GTTCCAACAT GATCCTAAAC TTTTGGAGC TTTTAAAGAA AAATATGAAA 1320  
 AAGAATTACG TGATCAGGAT GCGCAAAAAG ATGCTTTTGA AAAATTAAAG GATATTGTAA 1380  
 20 ATCAGCATAA TCATGTTCTA TTGTTATATG CAGCAAAAGA TACTAAACAT AACCAAGCTG 1440  
 TAGTACTACA GCAGTTGCTC AATACTTAGT TATATATGTT TATCGTGAAT CACTATAAAT 1500  
 25 GTCGCTAACT TCATTTCTAA TATTTATTTT TAAAAGCAT AATTACTACA ATTAATTGGA 1560  
 ACTTTAATAA TTAATAAAT TGGAACAATA TTTTACTTTA ACAAATAAA GTTTTAAA 1618

## (2) INFORMATION FOR SEQ ID NO: 604:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 604:

ATTATAATGC AAATATTGAA GCATTTAAAA CAGTCGCTAA AGCAGTAGGC AAAGAGAAAG 60  
 40 AAGGCGAGAA GCGTCTGGAA AAGCATGATA AAATATTAGC GGAGATTAGA AAGAAAATTG 120  
 AACAGAGTAC GTTAAAATCT GCATTTGCAT TCGGTATCTC AAGAGCAGGT ATGTTTATTA 180  
 45 ATAATGAAGA TACATTTATG GGACAATTCT TAATTAAAAT GGGTATTCAA CCTGAAGtca 240  
 mAAAArAmAA AACTACGCAT GTTGGTGAAC GCAAGGGTGG TCCTTATATA TATTTAAATA 300  
 ATGAAGAACT TGCCAATATC AATCCAAAAG TTATGATTTT AGCCACTGAC GGAAAAACGG 360  
 50 ACAAAAATAG AACGAAATTC ATTGATCCTG CAGTTTGGAA ATCATTAATA GCTGTGAAAG 420  
 ATAACAAAGT TTATGACGTT GACCGAAATA AGTGGTGTGAA ATCAAGGGGG ATTATCGCAA 480  
 55 GTGAAAGTAT GGCAGAAGAT TTAGAAAAAA TTGCAGAAAA AGCAAAATAA AAATACAGCG 540

	TGTGATGATT TACCTGAAAG TTTATTTTCGA ATAAATTTAA TTACATAACC GACAAGGATT	660
	GTTTTAACAG TTCTTTTAAT GAATTGGCGC ATCGTTACAT ACCTCATTTT TCTATATCTT	720
5	ACGAACTATA TACCCATTCA TATATGCTTT TTAAACGTCA TTGTCACAAT TTAATTTTTA	780
	GGAATATAA TATAACCATC TTTATCTGCT TTTTITAGTAA AAATGACAAA AATTGCATGT	840
10	ATTATTGaGA TGATGGTAGG GATACCTGTC CAGAAAAATA ATAAGTGAAA AAGACCTTGT	900
	CCAAATTTAT CAGCATAAAA TTTATGaATA CCTAAACCTC CAAGAAATAA TGCAACmATa	960
	ACATAAATGG CTTTATTGAC TTTCATTTGT AAtCCTCCTT AACTATAATT CTACTTAAAT	1020
15	TCGTTGTGAA AACCAATATT TCTAACTTTA GAATTTTCAA ACTTTCTAAA ATTATAAGTA	1080
	TATCTTTTTA AAATAAGCTA GAATTTCTAT ATAATAAATG TTAATAACGT AAAAGGGAAT	1140
	GATGACATAG TGATACGTCA AGCACGTCCA GAGGACCGAT TTGATATTGC GAAGTTAGTT	1200
20	TATATGGTTT GGGATGATAT GGAATTAGAA TTGGTAAAGC ATCTACCTAA AGACATGGTA	1260
	TTAGATGCAA TTGAAAAAAG CTGTGTTGAT GCAACATATC GAACTTTTTA TCAGCATATT	1320
	TTAGTTTATG AAGTAGAAAA TAAAGTAGCA GGTGTGATTA TTAGCTATAG TGGTGAAAT	1380
25	GAATTGAAAT ACGAAAAAGC ATGGGAACTA CTTGACTTGC CAGAAAAAAT AAAACAATAT	1440
	GGCACGCCAT TACCTGTAAA AGAAGCTAAA GACGATGAGT ATTATATAGA AACAAATTGCG	1500
30	ACATTTGCAG CATATAGAGG TAGAGGCATC GCGACAAAGT TATTAACGTC ATTACTTGAA	1560
	TCAAATACAC ATGTTAAATG GAGTTTGAAT TGCGATATTA ATAATGAAGC AGCATTAAAG	1620
	TTATATAAAA AAGTAGGCTT TATATCTGAT GGACAGATTG AATTATACAA GCACATGTAT	1680
35	CATCATTTAA TTGTTAAATA AAATACTCGA CAGTTCGATG TAAGTCGATT GCCGAGTAGT	1740
	ATCATTTTCT ATTAAATGCC TGCAAATAAT GCACTAATAT AAATACCTAA TGCATATAAT	1800
	AAACCGAAAA ATGTATTTGT TTTACCAGCA GCAGCCATTG CTGGCATCAT TGTAGGCGGT	1860
40	GTATCATTCT TCTTGAAACG TCTGATAACT TTAACAGGCA TTGGGAATGA TAACAACGCA	1920
	AGTAAGTAAA ATAATGAGCC ACCAGGTTTA ATAATGATCG TAAGTACAAT AAAGGCATAA	1980
45	GCGATAAAGT ACATGATTGC CATAAATGTT AAAGAAGCAT TTTTACCTAA TAGAATGGGT	2040
	AAAGTTTTGC GACCACTTGC TTTATCTTTG ACACGGTCGC GAATATTGTT AGCCATATTA	2100
	ATTAAACCGA TAGTG	2115

(2) INFORMATION FOR SEQ ID NO: 605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1003 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 605:

5 TATGTCTCAA ACTCAAATTA ATCAAATGTT CCAGCAGAAA AACATGTCTA CTGAATTAAA 60  
 ACGTCGTTAT GCACAACGTT TATTACAGTT TCCACATGTA CACAATAAAG AATACTTGAA 120  
 ATCTTATGCT AAAAACCCTA AAGAACTAA AGATAGTTAT ATTTCTGGTT TTAAAGAGAA 180  
 10 TCAATTGATT AAAATAGAAG CGATTAAATC ATTGTTTGCA ATGGATAAAT CTCCATTAGA 240  
 ACATGTTAAA CCTGCTACAA AACCAGACGC TTCTTGGGAT GAGATGAAAC AAAAAGCAGT 300  
 TGAAATTGGT AAAGCTGATA CTACATCGAA TAAATTGGT ATTAGAGATC AATACTGGAA 360  
 15 ATTAATTCAA GAAAGTAAGC GTAAAGTTAG ACGTGACTAC GAATTCAATG TTAATTCTCC 420  
 AGAATTCCAA GATTTAGAAT TACTTGTAAG AACAAATGCGT GCTGCTGGTG CAGATGTTCA 480  
 20 ATATGTAAGT ATTCCATCAA ACGGTGTATG GTATGACCAC ATTGGTATCG ATAAAGAACG 540  
 TCGTCAAGCA GTTTATAAAA AAATCCATTC TACTGTTGTA GATAATGGTG GTAAAATTTA 600  
 CGATATGACT GATAAAGATT ATGAAAAATA TGTTATCAGT GATGCCGTAC ACATCGGTTG 660  
 25 GAAaGGTtGG GTTTATATGG ATGAGCmAAT TGCGAAACAT ATGAAAGGTG AACCACAACC 720  
 TGAAGTAGAT AAACCTAAAA nTTAAAATAC AAATAGCACA TAACTCAACG ATTTTGATTG 780  
 AGCGTATGTG CTATTTTTAT ATTTTAAATT TCATAGAATA GAATAGTAAT ATGTGCTTGG 840  
 30 ATATGTGGCA ATAATAAAAT AATTAATCAG ATAAaTAGTA TAAATAAACT TTCCCATCAG 900  
 TCCAATTTGA CAGCGAAAAA AGACAGGTAA TAACTGATTA TAAATAATTC AGTATTCCTG 960  
 35 TCTTTGTTGT TATTCATAAT ATGTTCTGTT AACTTAATAT CTT 1003

## (2) INFORMATION FOR SEQ ID NO: 606:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 1097 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 606:

45 GCTnTTATAT TTAaaaaaATT TATTnGCGGA TAATTACCTT TATTAAATCC CACCCATTAG 60  
 50 GAWTaCGAGT AATAGGACTA ATACTGGAAT CACATAATGT AACATAACGT CCCTCCTTTA 120  
 ACTTAATTTT AATTGTAATC AAATTTGACA ATAAGTCAAA mCATTAAATAC CTATGATArG 180  
 TATCATTTAT TAACATATGT ATCATATTTT TAATCTTGCG TAATTTTTAT CGTTAACTAT 240

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CTTTTGTCAT TTTAATTATG TTAAGATAAT AGTAGTTATA GAAGTTCAAT CTATAGGAGG 360  
 CATAGCATGG ATATTCCAAA AATCACGACA TTTTAAATGT TTAATAACCA AGCTGAAGAA 420  
 5 GCTGTAAAC TATACACAAG CTTATTTGAA GATAGTGAGA TTATAACAAT GGCTAAGTAT 480  
 GGTGAAAATG GACCTGGTGA TCCCGGGACT GTACAACACT CAATATTTAC ATTAAATGGA 540  
 10 CAAGTATTCA TGGCGATTGA TGCTAATAGT GGCACAGAAT TACCAATGAA TCCTGCGATT 600  
 TCATTATTTG TTACAGTAAA AGATACTATT GAAATGGAAC GACTATTTAA TGGATTAAAA 660  
 GATGAAGGTG CCATTTTAAT GCCAAAAACG AATATGCCAC CATACAGAGA GTTTGCTTGG 720  
 15 GTTCAAGATA AGTTTGGAGT AAGTTTTCAA TTAGCATTAC CTGaGTAAAA GGATTTCGCAC 780  
 AGCtTGgAAT GATAAAGAAA CACTTTTTCT TATGCATGCG TTTTACCTAT GTATTTCTAT 840  
 TTTAAGTACA CATTAGCATT TTAGTTTCGC TCATTTTAA AATCACAAAG ATAATTTGTA 900  
 20 ACTTAAATGA TGATACGTTA TTTAAAAACA CGATACTTCG TTTCAATGAA CGCATTAAAT 960  
 AATAAATAAA CACCTCACCA TAAGAAAGGA CTACTTTCTT TTGTGAGGTG TTTatTTGTC 1020  
 25 GACAACTTGA TTATGATTGT TTCATTTTTT GAATAAGTTC ATAATCAGGT GTAGCATACA 1080  
 AAGTTTTTTG ATTGTCA 1097

## (2) INFORMATION FOR SEQ ID NO: 607:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 2031 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 607:

40 GAGGTCTAGC ATGTCTCGTT CAAAAAATA CTTTACTTA TCTAGCTTAA TGATTATTTT 60  
 AAGCTTTTTC TTTAATACAA ATAACGTTTT CCTAAGTGGA CTTTTTAATT CTTTTATTAA 120  
 ATTAATACTT TTCTGCAGTG TTATTAAGTC AATTGTACTA ATTTTGTCTA TAATTTTTCG 180  
 45 AGATCGTTCA ATTAAATCAC TAAAGCCTGA TGCAGATTGG ATTAGAATTG CGAGTAAAAG 240  
 TTTGCCTTGG aTTATTCTAA TTGTTATTTT AGTACATATC TTTTCAATTG TTCGTACATT 300  
 CGGTTTTATT TAAAAAGTT AATATGTCAT TGTAGCCTTA ATACAAAACA ATACAATGTA 360  
 50 TCATGCTATA ATGAGTAAAA CAATTTGATA ACGTTGTTGC GTATAAAAAA TATTAGATTT 420  
 TCGAAATCAT AACTATGCAT CTAATCGCTA TAGTTATACA ACAAGATATA ACATATAATG 480  
 55 AGGTTTGATA ATGCATCGAC AATTTTTGTC GTCGCGTTGC CAAAACCTCT TTTTAAATT 540

	TTTAGGCGCT TTATTACGTT ACCTCATTTT TTTTCTGAAT ACTGACGGAG GTTTTCCAAT	660
	CGGAACACTG ATAGCCAATT TGACTGGTGC CTTTGTAATG GGATTGCTAA CAGCCTTAAC	720
5	AATTGCATTT TTTTCAAACC ATCCGACCCT AAAAAAGCT ATTACGACTG GTTTTCTTGG	780
	TGCTTTAACG ACTTTTTTCAA CATTTC AATT AGAATTAATA CATATGTTTG ATCATCAACA	840
10	ATTTATAACT TTACTIONTAT ATGCTGTAAC AAGTTATGTC TTTGGTATTT TGTTATGTTA	900
	CGTCGGTATA AAAC TAGGTG GTGGTTTATC ATGATATCAA TCATTTTAGT CATGATTGGC	960
	GGCGGTTTTG GCGCAATTGC TAGAAGTGCC ATTACTGATT ATTTTAATCA TAAATTTACT	1020
15	TCAAAGTTAC CTATCGCAAC ATTGATAGTA AATCTAGTTG GTAGTTTTTT AATTGGATTA	1080
	ACTATAGGCT TATCAATTTT AATCTCATGG TTCCCTGCGT TCTTTGTTAC CGGTTTTTTA	1140
	GGTGGCTTAA CAACTTTCTC AACGTTAGCC AAAGAACTTA CACTAATGAT GACGCCAAAA	1200
20	TTTAATATTA ACCTTTTTCT CAATTATTCA CTTTTACAAT TCATCATTGG ATTTATAGCT	1260
	TGTTATATTG GCTATCATAT TAAAAATAA AATGCTTCAT TCAGCAAATA GGTAAATTAC	1320
25	GACACCTTCC TGAACGAAGC ATTTTTTAAT TTTCATGCAA ATTTTAAAGC ACCATATAAT	1380
	GCCTACCAA TTTCAATAAT CTTTGTTGCC GTTTAAATAA TGTGAATGTC AATAAATTCT	1440
	CCAAAC TAGT CGAAAAATAA GGGAGTGGGA CATAAATCCC TAAAAAACA GCAGTAAGAT	1500
30	AATTTTCAAT TAGAAAATAT CTTACTGCTG TTCTCTATTT ATACAATACT TCGTATTGAA	1560
	TGGcTTCGCT TTCCTAGGGT GCCGTCTCAG CCTCGGcTTC GACTGGCACT GCTCCCTCAG	1620
	GAGTCTCGCC ATTAATACTA CGTATTAACA TGTAATTTTA CTTTACATA CTTTAAAAA	1680
35	TAAGACACTT TGCCCAACTT AACTACCAA TAGAAACCTC TGTTAGAATT CCTCAAAATG	1740
	ATATTTTCGCG ATATGTTAAT GAAATTGTTG AAACGATACC TGATAGCGAA TTCGATGAAT	1800
40	TCAGACATCA TCGTGGCGCA ACATCCTATC ATCCAAAAAT GATGTTAAAA ATCATCTTAT	1860
	ATGCATATAC TCAATCTGTA TTTTCTGGTC GAAGAATAGA GAAATTACTT CATGACAGTA	1920
	TTCGAATGAT GTGGTTAGCT CAAAATCAAA CACCTTCTTA TAAACTATT AATCGTTTTA	1980
45	GAGTGAATCC TAATACTGAT GCGTTAATTG AATCTTTATT TATTCAGTTC C	2031

## (2) INFORMATION FOR SEQ ID NO: 608:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TCCCCGGGAA TCGAACCCGC GAnCTCCTGC GTGACATGCA GCGTGTTAA CCGCTACACT 60  
 ACGAGACCTA TTAnATTAAA AACTATGTAT TGCGGGAGGC GGATTGTAAC CACCGACCTT 120  
 5 CGGGTTATGA GCCCCACGAG CTACCGAACT GCTCCATCCC GCGCTAATAT TATTTTGAAT 180  
 TACCTAATTA ATATACCATA ATCAAAAACC TAAAGTsrrG AACTTTTTTGA ATTTAATTTA 240  
 10 AATGTTATCT CTAAATAAT TACTTAAATA TCGTAGCAAC ATGTTCTCTG TTGAACACAA 300  
 ATATTAGTAT ATTCATTTTT GTAGTGACG TCAACGACAT TTTCAAAGTT TTTTGTGTAA 360  
 AAAAACGCTT CTATTCCCT TTTATCATAT AAGTGTCTAA TAGTTGTCAT AAATAGTGkT 420  
 15 AAAGCATTTA AAAAGGTATA GGAGTTATAA AGTTTACAAC GCCTATACCT TCTGAAAAG 480  
 AAATTATAAA AGCTTGTTAC ACCGCATATT CTTTCAGTCA GCGACTACCA ATATAACATT 540  
 GTAGCCCTAA GACATTGCTT GACGCCTCAn TTACAACAAT TTTTCAAAAT CAGCAGCTAC 600  
 20 CTACTGACAC AACATAACAC AACCChTACA CTAnCTATCG TGTCATGTAA TCTTGCATCC 660  
 GATCTTGCAA CGCTGTAAAT GTTTCGA 687

(2) INFORMATION FOR SEQ ID NO: 609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 843 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 609:

35 GTGTTGAATA CTTTGACAAA ATGAAATCAT TTGTTCTTTC GTTTCAAATT TAACTGTTTG 60  
 AATTAAATCA GTTCGTTTTT CGTAGTACTT CGGCGTTGTG TTCATATTCA TTTTTTCTAA 120  
 40 AAATAAACTA GTAAACAATG CACCTTTAAG ACTCTGACTG ACAACGTGTG GTGCTAAAAA 180  
 GAAACCTTGA TACATTTCAA GCAATGCATT TAATGATGCA CCCGCTTCTT TACCAATACC 240  
 AGGTGCTGTC AATCTATAAC CACATCGTTC AATTAAATCT TTTCTACCAG CAATGTATCC 300  
 45 ACCAATCTTA GCTAAACCAC CGCCAGGGTT TTTAATTAAT GATCCTGCTA TTAAATCGGC 360  
 ACCACATTCT ATAGGTTTAC GTCTTTCAAC AAATTCCCCA TAACAGTTAT CCACAAATAT 420  
 TAAAATATTA GGATGCACGT TTTTCAACCT AGTAATTACC TTTTCAATTT CATCTAGCGG 480  
 50 AATTGAAGGT CTTTGATCAT AGCCTTTCGA ACGTTGAATC GCTATTACTT TGGTGCCTC 540  
 AGAAACCCCa TCTAACACAC TTTCAATATC GATCTTACCT TCTTTAAGTG CAATATCTTT 600  
 55 ATACGATmCG CCATGCTCCA TTAAACTTTC AATACCATTT CCGTTTACGC CAATGACTTC 660

ACTTTGTAAT GCAATAGTAA TCGCATGCGT ACCTGAAATA ATTTGCGGAC GAACAATTGC 780  
 ATCTTCTGCT TTAAATGCCT GCGCATATAT TTCTTAATTG AACGAATTTA GAACTAATCG 840  
 TAA 843

## (2) INFORMATION FOR SEQ ID NO: 610:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 775 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 610:

GATTATTATA AACCGAATGA AACAAAAAAG TTTTACATA TTTTCAACAA CTTTATTTC 60  
 ATAAAGCATC AAGTTGATCT AAAGTTTGAT TCATACCTTG TTCAACACCC ATGTTTATGA 120  
 CTTGTTGAGC GGCTTCTTTT GTTGGAATA CCGATGTTGA TGTCACTGTC GTTTTCGTTG 180  
 TATTGCTCTT GGAAATGAC AAAGTAATTT TCATGCTTGG CATTTTTGTA TCTTTTGCAC 240  
 CTTGAGGTGT CGCAAATGAG TCAATATATT CAATTAAATA TGGACGCTTA ACCGTTTTAT 300  
 ATTCTGCTAA TGTATAGCTG GTCATTGTAG GTGTTTTAAT CGCATAAAAT GCATCACCGC 360  
 CTGAAACAGC ATTAAAGCGA AACACTTTGG TACTAGCGTC TTTTGGATGA AACCATTTTT 420  
 CAAATAATGC TTTkGTCGTA TAGGCATCAA ACACCTTTTC AATCGGTGCT TCTATCGTTC 480  
 TTGAAAAAAT AATTTTATTA TCTTCAACTT TAATCGTCAT CTTCCCACTC CCTATCTTTT 540  
 ATATTTACTC ATCTTAACAT GCATTGAGTA ACATATGTTA CCAAATCATT TGTTATAAAC 600  
 TATAGTAATA TTAATCATTC CCTCTGTnGA AATTGATAAC TACGAAATAA AAAACACACT 660  
 CTATTCAGCT ATTAACAGTT GAGTAGAGTG TGCAAACCTG TTGAATTAAT GCGCTAACAT 720  
 TTCTTCTTTG ATTTGGTCTT nATnTAATTT TGAAGGATAA TATGTTGGCC AGTTA 775

## (2) INFORMATION FOR SEQ ID NO: 611:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 728 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 611:

ATCAAAATTT GATACTAAAG GGCTCACGCT ATTTTATGTA TTTATTGGAT TGATTATGTT 60

TGTGGCAATG TGTTTATTTA AAGTAGAAAA ACATGTTTCT TCACCATTTT TACCTGTGGT 180  
 TGAATTTAAT CGTTCGATTA CTTTAGTTTT TATAACTGAC CTTCTAACAG CTATTTGTTT 240  
 5 AATGGGATTC AATTTATATA TTCCAGTCTA CCTTCAAGAA CAACTAGGAT TATCTCCATT 300  
 GCAAAGTGGG TTGGTTATTT TTCCTTTATC TGTAGCTTGG ATTACATTGA ATTTTAATTT 360  
 10 ACaTCGAATT GAAGCAAAAC TATCAAGGAA AGTTATTTAC TTACTATCAT TTACATTGCT 420  
 ACTAGTAAGT AGTATTATCA TTTCAATTGG TATTAAATTG CCGGTACTTA TAGCATTGTG 480  
 GTTAATTTTG GCAGGATTAA GTTTTGGATA TATTTATACG AAAGATAGTG TGATTGTCCA 540  
 15 AGAGGAAACT AGCCCATTAC AAATGAAGAA AATGATGTCA TTTTATGGAT TAACTAAAAA 600  
 TCTTGGGGCA TCAATAGGTT CAACAATAAT GGGATATCTT TATGCGATAC AATCAGGAAT 660  
 CTTTGGTCCA AACTTACACA nTGTGTTAAG TGCTGTTGCT GTAATTAGCA TGGGCTTATn 720  
 20 GTTTTATG. 728

## (2) INFORMATION FOR SEQ ID NO: 612:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 913 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 612:

TATCAGAGCA AATAAGCAAG TTAGATAAAA AGATTCTGA CTTACAATTA ATTAGACGCT 60  
 35 CTGTATGTGA ATTTATTAAA GGA CTCTCTC TAATAGATAC CAGCATTTTA AACAAGACAC 120  
 TACAGTCACA ATATGATAAA GAAGCATCTA TAAAATATGG TCATACGAAA GCATATCANT 180  
 40 CATTTATTAG ACGTAAAGAC AGCTTACAAT CGCAGGATAT CAGACATAAA TTGACAACTA 240  
 TCTTCAATAA ATTTAATCAT ATGTCTTTGA GTCATTATCC AATCCAAGAT TGTAGTGATC 300  
 TCGTATTTGA GTGGAAGGCA TTTATGAACA CTATCGCTGA TTTTGmTGAT GAAACATTAT 360  
 45 GCTGTATTGC TAAAACATAT GAAGATGATA CGCGTTTCAA AGATTACTTT AATTCATATG 420  
 ATAATCAAAA TTTAGCATCA TACATTCAG AAGCTGTAA TTATTTTTTG AGCAATGTGA 480  
 50 ATAAGAGCGA CAATTTTTAA TCCTCATACA GATGCTACAA CACTGAATAC ACCAACTAAA 540  
 ATAATTGTTT AAAGTAGAAA ACTAATCATT TATTCTCTAA ATCAATAACT ATATTAAAAG 600  
 TTATACCTTT GCAAAGCGAA TTAGTATAGG TTACCGAAAG GAGAAAGGAT TAGGTTCCAT 660  
 55 TCGATTTATA AAAAAATATA TTTCGAAACA TACAAAAGCG CCAGAAGATA ATCATTTCTT 720

TCAATGCATA TTCAACTAGC TCAGGTTTAC TCTTTAAGCC AAGCTTTGTC ATAATATGCG 840  
 TCTTATGTGC TTCTACTGTT TTCACAGATA CAAATAATTT CTCTGCAATT tCTTTATTCC 900  
 5 CGTAACCTTT GGC 913

## (2) INFORMATION FOR SEQ ID NO: 613:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 654 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 613:

ACAAGTGTG ATGTCATAGT AGCGTCAAWT GTGCTTTATT TCTGGGACAC ATTTAAATTT 60  
 20 TTCCACCCCA TTACTTGGAG CTTAATCTTT ATTACAATTT TACTATTATT AAACATTTTT 120  
 TCTGTAAAAT CATTTGGAGA AACTGAGTTT TGGTTATCAT TGATTAAAGT GTTAACAATT 180  
 25 ATCGTATTCG TTATTTTGG CTTTTTAATG ATTTTCGGTA TCTTAGGTGG TCATACATAT 240  
 GGATTTGAAA ACTATACAAA AGGCCAAGCA CCGTTTGTG GTGGTATCTC TGGTTTCTTA 300  
 GCGTATTAT TAGTCGCCG ATTTTCGGTT GGTGGTACAG AAGTAGTAGC AGTAACTGCT 360  
 30 GGTGAATCAG ATGACCCTAA AAAGTCTATG CCTAAGGCAA TTAAACAAGT ATTTTGCGCT 420  
 ATTCTTTTAT TCTATGTCTT ATCAATTGCA GTAATTGGTG CAATTATTCC GTACACAGAT 480  
 CCATCATTAT TAAGAGCAAG TAGTTCAATA AGTCAAAGCC CATTTACAAT TGTATTCGAT 540  
 35 AGAGTAGgCA TAGCCTTTGC AGCATCAGTA ATCAACGCGG TTATTTTAAC TTCATTATTA 600  
 TCCGCTGCAA ATTCAGGTGT TTATACAACA GGCAGAATGT TGTATTCCTT AAGT 654

## (2) INFORMATION FOR SEQ ID NO: 614:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 642 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 614:

TCGATCTTTA TTGATAATAA TTAAATTGTC GCCTTTAAAA TGTGATATTA ATCCTGCGGC 60  
 AGGnTGTACA ACGAGTGATG AACCTAGTAC AACAAGGGTG TCAGCATGTT CAATTTTATT 120  
 55 TAATGCCCTT ATGATGGTAG GTTGATCTAA CATTTACCG TATAATACGA TGTCCGGTCG 180

ATAAGATTTA TGACATACAT TACAATAAAA ACGATTTAAC GTGCCATGTA ATTCATCAAC 300  
 ATGTTGACTT CCAGCGTCTG AGTGCAAACC ATCGATATTT TCGTGATGA CACCTAAAGA 360  
 5 TTGTTGATTA CGTTCTAATT TTGCAATCCA ATCATGAACG ATATTGGGCA TCGTATCGAC 420  
 AAATAGTAAG CGCTTATGGC AGAAATTGAT AAAACCTTCA GGATCATCTT CTAAATAATC 480  
 10 ACGGCTTAAC AAGTATTCTG GCGAAAGCCC ATCTTTTGaA ATTTTCATCAA ATAAGCCACC 540  
 CATTGaaCGG AAATCTGGAA CGCCACTTGC GACAGATACA CCAGCACCTG TAAAAAATGT 600  
 AATACGATTC GAACTATCTA TAATATGTTT TAGTGTCTCT AA 642

(2) INFORMATION FOR SEQ ID NO: 615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 615:

TTTCCCCnCC CnCCAAATA TCCAAnGGAA CTTTAATAGT CCAATTGGCA CAGTAAAACT 60  
 ATGGCATTITT ATAAGTATAA TATATCTGTA ATTTATGGTC AATTAGTAAA TTGTTTTTTA 120  
 30 TTTGAAACAT ATTTACATc AAAATCACAA AGACTTTTAG ATTTTGtTCT AAAAATCTCT 180  
 TAATAATTTA TTAAATGAGA AGAGTTGCTT ATATAGTAAA TTGTGAAGCC GTTAAACAA 240  
 CGTTACAAAA CCTATATCTT TAATACGGAA CCATATGGTA TGAATCAAGG AATACTTAAA 300  
 35 CTAAAACTTC TCTATCAGAT TTATTTGTTG CGAAATCAAC AACTTTAATT GCTTGCCCTT 360  
 CATTTAATGG ATAATTGCT TCGTAATTT TAACTTTTAC AATTGACCT ATGAGTGATT 420  
 CGTCACCTTC AAATTGTACT TTCATATAAT TATCTGCATA TCCAATAAT GTACCTTCTG 480  
 40 TGtCACCCCTG TTCCTCAGGA ATTACTTCAA GCACATCTTG ATCAAATTTA GACGCATATA 540  
 ACTTTCCGAG TTGATTGCTT AGCGTAATTA ACTTATGCAC CCGTTCATTT TTAATTTCTT 600  
 45 CATCAATTTG GTCATCCATT CTTGCAGCTG GCGTGCCAAT TCTAGGAGAA TAAGGGAAAA 660  
 CATGCAGTTC AGAGAACTTA TGCTTTACGA TAAAATCATA TGTTTCTTGG AACTCAGCTT 720  
 CAGTTTCACC TGGGAAACCA ACAATTACAT CACTCGTAay TGCCAAGTCT GGTAAAGCTT 780  
 50 TATGCAATTT TGTTAATCGT TCTGAAAATC TATCCATTGT ATACTTACGT CTCATACGTT 840  
 TTAATACTGT ATCTGAACCA GATTGTAATG GAATATGCAA ATGACGCACA ACTTTTGTTG 900  
 AACGTTCTAA AACGTCAATT ACTTCATCTG TAAGTTGACT TGCTTCAATT GAAGAAATTC 960  
 55



CTTTTAAATC TTGACCATAT CCACCTGTAT GAATTCCTCGT CAATACAATT TCCTTATATC 1080  
 CTGAATTCAC TAGTTGCGTC GCTTGTTCAA CTACTTTTTTC CGGATCTCTT GAACGCATTA 1140  
 5 AGCCACGAGC CCATGGAATA ATAcAGAATG TGCAGAAGTT GTTACAACCT TCTTGAATTT 1200  
 TTAATGACGC 1210

(2) INFORMATION FOR SEQ ID NO: 616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 652 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 616:

20 TAATAAAATA CAATACTTTT CAATACAGAG AATCCCGCAA TGTCGGGATT CTTATTTATG 60  
 CTGATTTTGT TTTGTCTAT GATCAGGGAC TTtCAGGGAC TCAATTAATT ATCACATTCA 120  
 TATTTTCTTA TGACCAAATT GATACATATG ATGCTATTTA ATGAGAAAAT TAGGCATCAC 180  
 25 TTGGTTATTG AATTCCTTC ATTAACTTT CCAGCTCAAT TTAATAGTTA GTCGACTATT 240  
 ATTCATTAAA CACTTTTTTAA TCATAAAAAA GTGTTTTTGTa TAATTCACTa CCaAAAAACAC 300  
 CTTCTTACTT ATAATTCTAT TTGTTACCA TTTCTAATCT TATCGGCTAA ATCATTCACT 360  
 TTTCTTAATC GGTGATTAC ACCTGATTTT GAAATTGGAC CAGTTGATAC CATTTCTCCA 420  
 AGCTCTTTCA ACGAAATTTT TTGATGTTCT ACTCGAATTC TAGCAATCTC TCTCAACCTG 480  
 35 TCTGGTAAAT TTTCAATACC AATTTCTTTA TCAATCAATT TAATGCTCTC AACTTGTTTT 540  
 ATCGCAGCAC TAACTGTTTT ATTTAGATTG GcCGTTTCAC AATTAACGAG TCGGTTAACA 600  
 GAATTACGCA TATCTCTTAC AATACGTACG TCTTCAAATT TTAATAACGC TT 652

(2) INFORMATION FOR SEQ ID NO: 617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 617:

ThACCACTTT AAAATAGCGC TTAATAAAAt AAGGGGGCAA GTCTTATGAC GtTTTACaAT 60  
 TTCATCaTGG GTTTTCAAAA TGtTAACACA CCATTTGGTA TATTGGCCGa ACACGTTAGT 120

TCTAATTACA CAGATCATCA ATTAATTGAA ACTACAAATA GAGCTATTAG CTTATATATG 240  
 GCAAATTAAT TTGAGTAGTA CCAATTATGA TGTATTAGTG CATCCCAAAT ATCTTTTGTT 300  
 5 TTAAGTTTA TTTCATCATT TCTTATCGAA AATGGTGTA TAATGTCTTT ATCTAACCAA 360  
 GTGTTGATAA GTTCATTTGG TACACCATCT AACAACATTT CACTTTTACT AATTATAAAA 420  
 10 CATTCCCAGT CAAGTGAAAC ATTTTGTGGA TTCACATAAT TACATTGATT ATGATTATCC 480  
 ATAAACACTC ACTCCTTTAA AATTCTGTAC TCTTCATTGC GTTTTACCCC GTCACATTAT 540  
 CTTTTAAACT AAAATCATCA TTACTTATGA AAAAAATGTA CATCAAAAGC AAAGGTTTTTC 600  
 15 GCTACCGAAA AAGTTTAAAT AATGGTtAA TATATtGGT ACTCATTTTA ATAAAAAGAG 660  
 AATACATTTT GAGCTATCAA TACTTTTTAT TGAAGAGGTG TTATTsyTGG CTAAAACGTT 720  
 ATATTTAATG CGCCACGGAC AAACTTTGTT TAATTTTAAG GGACTAATTc AGGGATTGTTG 780  
 20 AGATTCGCCG CTAACAGA 798

(2) INFORMATION FOR SEQ ID NO: 618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1786 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 618:

ATACGCTCAA TTGATAAAAA TTTAATATCT GCCATTTGTA TACGCATCGC TTCGAATGTT 60  
 35 TCCGTTGCAA TATCAAATGA TAATTGTGAC TGGAACCTTA AACATCGAAT CATACGTAAA 120  
 GCATCTTCTT GGAATCGTTC CTCAGCTATA CCTACAGTTC TTATTATTCTG ATTATTAATA 180  
 TCTTGTTGAC CATCAAAATA ATCATACAAT TTGTATGCTG TATCCATTGC TATCGCATTG 240  
 40 ATCGTGAAAT CTCGTCGTTG CAAATCTTCG TATAAATCAC GAACAAATGT AACACCACTT 300  
 GGTCTACGGT GATCGACATA ATCTTCTTCA GCCCGGAATG TTGTCACTTC ATAATTTtCA 360  
 45 TCATtAAAAa CTACATTtAT CGTGCCAtGT yCTThACCTA CAGGTATCGT ATGACTAAAG 420  
 ATAGATTCTA TTTCATCCGG CGTTGCACTT GTTGTGATAT CTATATCATG AATATTTCTT 480  
 CCCATGACAT AATCTCTTAC AGAGCCACCT ACATAATATG CTTCAAAACC ATTGTCTTGA 540  
 50 ATTTGTTCTA ATATAGGCCT TGCCTGTTCA AATAATGATT TATCCATATT ATTACTCGCC 600  
 TTTACTTTTG TTATGCTCAT TTAGCATTTT TTGATAATAA TACTCATATT GATCTGTAAT 660  
 AAGTTCTGAT CCAAAACGTT CAGCAATATC TGCTAGCATG TTTTCTGAA GTTTGTTGTA 720  
 55

ATCTACGACA AATCCAGTTT CACCATGTTT AATAACCTCT TTAATTCCAC CGGCATTTGA 840  
 ACCAATTGGA ACGACGCCTG TWTTCATAGC CTCAAGTAAA GTTAGTCCAA AGCTTTCTTT 900  
 5 TTCACTTAAT AATAATACTA AGTCAGATAA TTGGTAAAT TCACTTACGC AATCTTGTTT 960  
 CCCTAAAAAT AAAACATCCT CTTCTACGTT TAACTCTTTC GTCAATTGAC GCATTGGCAC 1020  
 10 TAATTCAGGA CCATCTCCAA GTAAAATTAA TTTACTAGGT ATCTTTTCAC GTACTTTTGC 1080  
 AAATGTTTCT ATAATAGTAT CTATGCGTTT TACTTGTCTA AAATTCGATA CATGTATTAA 1140  
 CACTTTTTCA TCTGGTGCTA TACCAAATG TGATTTTAAT GCTGTGTTAT GTTTAGTTGG 1200  
 15 AAATCATTT TCACGTACAA AATTATAAAT CGGTATAATT TCTTTGTTAG TTTCAATAAT 1260  
 TTCAITGTT TCTTGTGCTA AAGATTTACT CACACTTGTC ACAATATCAC TTTTTTCAAT 1320  
 GCCAAATTTA ATTGCACCTT GGAGTGAATG ATCATAGCCC AAAACAGTAA TATCAGTACC 1380  
 20 GTGTAGCGTT GTCATAATTT TTATATCTTT ACCTGACATC TCACGAGCTA AAATCCCACA 1440  
 AATTGCATGA GGTACAGCAT AGTGCATATG CAACAAATCA AGATCATATT CTTTAATAAC 1500  
 25 TTCAGCGATT TTAGTACTTA ACGTAATATC ATACGGTGGA TACTGAAATA CTGCATATTG 1560  
 ATTCACTTCA ACTTGATGAA AAATCATATT CGGTAATGGT TTTCTTATTC TAAACGGGAT 1620  
 ATTTGAAGTG ATAAAATGTA cTTCGTGACC TCGCTCTGCT AATTTAATTC CTAATTCTGT 1680  
 30 GGCAATAATT CCAGAACCAC CCATGGACGG GTAACATGTT ATACCTATCH TCATTGCGTT 1740  
 GCCCATCCTT TCTTTCTATT TCTCnCTATG ATnCTCGATG CGTAGA 1786

## (2) INFORMATION FOR SEQ ID NO: 619:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 844 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 619:

45 ACAGGTATGG ACTTnGCTCA AATGACACGA CATTATTTAT CAAGACCTAT TGCTATAATC 60  
 TTTTGGATCA TTGCAGAACT AGCAATTATC GCTACAGATA TTGCTGAGGT TATTGGTAGT 120  
 GCTATTGCTC TTAATCTCCT ATTAAACATA CCTTTAATCG TCGGTGCACT AATAACTGTA 180  
 50 CTTGATGTAT TTTTACTACT TTTTATAATG AAATATGGTT TTAGAAAAAT TGAAGCTATT 240  
 GTTGGTACAT TAATTTTCAC AGTGTTATTC ATCTTTATAT TTGAAGTCTA TATTTTCATCA 300  
 55 CCACAGTTGA ATGCTGTGTT AAATGGATTT ATACCACATA GTGAAATCAT TACAAATAAC 360

TTACATTCAT CAATTGTACA ATCTAGAACA TACTCAAGAC ATAACAATGA AGAAAAAGCG 480  
 CAAGGaTTAA ATTTGCTACG ATAGATTCGA ACATTCAGTT ATCAATCGCA TTTGTAGTCA 540  
 5 ATTGCTTATT ATTAGTGTaTA GGAGCATCAC TATTTTkCAA CTCAAATGCT GACGATTTAG 600  
 GTGGTTTCTA TGATTTATAT CACGCCTTAA AAACCTGAACC TGTACTAGGT GCAACAATGG 660  
 GTGCAATCAT GAGTACATTA TTTGCAGTTG CATTATTAGC GTCAGGTCAA AATTCAACGA 720  
 10 TTACTGGTAC TTTAGCAGGA CAAATTGTAA TGGAAGGATT TTTAAGATTA CACATACCAA 780  
 ATTGGTTAAG ACGTTTAATT ACACGTTCTC TTGCTGTCAT TCCTGTTATC GTATGCTTAA 840  
 15 TCAT 844

## (2) INFORMATION FOR SEQ ID NO: 620:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 620:

TGTATTGCAG TCATGCCATA AATTTTTTTGA ATAATAAACG GAGACGCAGA AATATAAGTA 60  
 AATAATATTA CAAATGTCAT ACCTTGGAAT GAGCATTGGT AATACAAAAC GTGGCGTCTT 120  
 30 CAaTAATATT TTGAAGTTTT TAAACATTGT CTTTAaTCCA CTACTTGACT CACGATTTGT 180  
 CACTGTTAAT GATTCAGGTA CTTTAAATAA AGAACCTATG ACCATGACGA AGCCAAAGAT 240  
 35 AGTCAGAATG ACAAAGACCA TACGCCAGAC AGAATAATTT AAAATTATGC CCCCTATTGT 300  
 TGGCGCAACA ACTGGTGCAA TACCATTAAC AAGCATCAAT AATGCCATAA ACTTAGTTAG 360  
 TTCATTACCA CTATACATAT CACTTGCTAT AGCTCTTGAA ATAACCTGCTG tGCGCCACCT 420  
 40 GTCACCTCCTT GAAGaAATCT TAATGCAACC ATCAGCCAAA TATTATGTAC AAAAACAATA 480  
 CCTAAACTTG CTAATGTAAA AATAATCATA GCTATAATAA GCGGCTTTCT GCGCCCAGTT 540  
 45 GAATCTGAAA TTGGACnAGC AACCAAATTA CCAA 574

## (2) INFORMATION FOR SEQ ID NO: 621:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AAGCAAGAGA GAGTACAACA TTTATATGAT ATTAAAGACT TACATCGATA CTACTCATCA 60  
 GAAAGTTTTG AATTCAGTAA TATTAGTGGT AAGGTTGAAA ATTATAACGG TTCTAACGTT 120  
 GTACGCTTTA ACCAAGAAAA TCAAATCAC CAATTATTCT TATTAGGTAA AGATAAAGAG 180  
 AAATATAAAG AAGGCATTGA AGGCAAAGAT GTCTTTGTGG TAAAAGAATT AATTGATCCA 240  
 AACGGTAGAT TATCTACTGT TGGTGGTGTG ACTAAGAAAA ATAACAAATC TTCTGAAACT 300  
 AATACACATT TATTTGTAA TAAAGTGTAT GGCGGAAATT TAGATGCATC AATTGACTCA 360  
 TTTTCAATTA ATAAAGAAGA AGTTTCACTG AAAGAAGTTG aTTTCAAAAT TAGACAACAT 420  
 TTAGTTAAAA ATTATGTTT ATATAAAGGT ACGACTAAAT ACGGTAAGaT CACTATCAAT 480  
 TTGAAAGATG GAGAAAAGCA AGAAATTGAT TTAGGTGATA AAT 523

(2) INFORMATION FOR SEQ ID NO: 622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1871 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 622:

AGAAGTGTGA nAAAAATTTA AnAGAGATAT GCACATAGAT GACGCATTGC TATATCCAAG 60  
 CAATTGAGAA AGCTGCTGAT GCTCCAAATC aCGGAATGAG GGAACCATGG AGAGTTGTGC 120  
 ATGTTCCGAA AGACAGATTA GGAGATATGA GTAAGGATAT TTCTAAATTT GCATTTCTTA 180  
 ATGAATTAGA TAAGCAACAA TGTCATTATG ATGCAGTTAC GAACTAGGT GGCATGTTAT 240  
 TGCTTATTTT AAAACAGAT CCAAGACAAC GTCAAAATGA TGAAAACTAC TTTGCATTG 300  
 tGCATATGCA CAAAATCTTA TGTGTTACT TTATGAAGCG GGAATAGGTA CATGTTGGAA 360  
 aTCGCCATTA TATATCTATG ATCCTAAAGT AAGnAAACAC TTGGTATAAA GnAAGATGAA 420  
 GTTCTTGCTG GATTCTTATA TTAAACGGAT TTAGAAGnAG ATATGCCTAA AGCACCACGT 480  
 AAAAATAGAA ACTTAATTAC ATTATATTAA TATGTATAAT TATAGAAACA TTAATAAAAG 540  
 CTGAGTCATG AATTGATGGA CATCTATCGA GTTAGAGATT TAATCTAACT TACTAGAGTC 600  
 GGTACAATAA CAGTCTCAGC TTTTATTGT GCAGTATATA CACATTTTAA TTTTAGTATT 660  
 TATTtAAAAG TTtCTGCTaA AAATGATTCA ACTTGTTTCA GTGACTTAGC ATTTGCTGAA 720  
 TGAAGGTGTG CAATTTTATC GCCGTTTTTA AATACTAGCA AGCTAGGGAT ACCCATAACT 780  
 TCATTTTCAA CAACTACATC TTCTAATTCA TCACGATTAA CAGTATACCA TTGGTAATCA 840

CCTGCCTCAA ATTAAACAAT TACAGGTGTA TCGCTATTAA TTACAGATTT AAATGATTCA 960  
 TTACTTTTGA TTGATTGCAT TGTAACAACT CCTCTAGATA GTTTAATAAT TTTTATTATA 1020  
 5 GCTAAATTTA TATCATAATA AAAAATTTTA GCTTCAAAAT GAAAGCCTTT TGCTTTGGAA 1080  
 AATGATATAT TTATTTTAAA TACATAAAGG AGGTTGCAGT CGTATGATTA AATTTTACCA 1140  
 10 ATATAAGAAT TGTACAACCT GTAAAAAGGC AGCAAAGTTT TTAGATGAAT aTGGCGTAAG 1200  
 TTATGAACCA ATTGATATCG TTCAACATAC ACCTACAATA AATGAATTTA AAACAATAAT 1260  
 TGCAAATACA GGCCTAGAAA TTAATAAATT GTTTAATACA CACGGCGCGA AATATCGTGA 1320  
 15 GCTTGATTTG AAAAATAAAT TACAACTTT ATCAGATGAT GAAAAGTTAG AGTTGTTATC 1380  
 ATCTGATGGT ATGTTAGTAA AGCGTCCTCT AGCAGTAATG GGCGATAAGA TAACATTAGG 1440  
 ATTTAAAGAA GATCAATATA AAGAGACTTG GTTAGCGTAA GTGaAATGTA AGCGTTTACT 1500  
 20 AAATATCTCG ATATTTAGAT TCATTACATG TAAAATGAAA TAAGCTATAC AATTGTTAAT 1560  
 TTTTATAAAT ATAGTTGAAT AGCATCTAGC CTTATGGCAT CATTAAATGAT GTAAAGATTA 1620  
 ATTAGGAGGG GATTCTCTTG GCAGTACCAA ATGAAYTGAA ATATTCAAAA GAGCATGAAT 1680  
 25 GGGTTAAAGT TGAAGGTAAT GTAGCAATAA TTGGAATCAC AGAATACGCA CAAAGCGAGT 1740  
 TAGGTGATAT TGTTTTCGTT GAATTACCAG AACAGATGA TGAAATTAAT GAAGGGGATA 1800  
 30 CGTTTGGTAG CGTAGAATCA GTTAAACTG TATCAGAATT ATATGCACCA ATCTCTGGTA 1860  
 AAGTAGTTnA A 1871

## (2) INFORMATION FOR SEQ ID NO: 623:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 623:

45 TTGCTGTAGA AGATAAAGAG TCCCATCAAT GGATAGGCTT TATAGGTTTG AATTATATTC 60  
 CAGAAACAAG CGATTATCCA TTAAAGAAT TACCGCTTTA TGAAATAGGT TGGCGCTTGT 120  
 TGCCAGAATT TTGGGGAAAA GGATTAGCAA CTGAAGGCGC AAAGGCAACA TTGAAGTTAG 180  
 50 CAGAAGAACA TCAAATATAC GATGTCTATA GTTTTACAGC AGAAGCAAAT AAAGCTTCAC 240  
 AACGTGTAAT GGAAAAAATT GGCATGACAG TGTATGATCA TTTCGAATTA CCAATCTAA 300  
 55 GTAAGTATCA TTTATTaAAA AGGcAAGTGC GCTATTACAT TAATCTTCCG AAAGTGAAAA 360

ATTAgGGGGT GtTtnGkTn ATTTTTTTAA n

451

## (2) INFORMATION FOR SEQ ID NO: 624:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 665 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 624:

15	CGATAGTTAT CTAAAGCCAT TTTnGATTGT GTTATGAAAT CTAATGATGC GTGATAATTT	60
	AATGCrACAT AACGrTaATA TAAAATATCA ATAGTGAACA TTTGAGCAAA TAATGAAGTT	120
	GTTGCTCCCA TATGCATCTC ATTTTCATCA GTTTTCCCAT AAGTTAAAAC AATATTTGAT	180
20	GCCTGTGCTA CGGGATTATC CCTTGTAATA GTAATTGTAA TTATAGGTAT ATGGTAGTCA	240
	TCAATAACTT TAACCATTGA TTGCATTTCA CTTTGCGTAC GATTGTTAGT AATAAGAATA	300
	aCACTGTCGT TCGAATTGTG AGTTGCTAAT AATGTAGCAA AAATATGTGT TTCTTGAACA	360
25	AGTTGAATAT TAAGACCTAT TCTTGATAAC TTTTGGTATA AGTCGGTAGC AACTACAAAA	420
	GATGCGCCAA AACCATATAT AAAAATCGTC TCAGAACGTT TTAAACAATG ACATATTTGA	480
	TCAATAGTTT TATCATTTAA TTCGTTATTT GCATGATTAA GTGCGCGTGT AGTACGTGTA	540
30	TGGAGTTTAG TTCTTAAAGA TTCTGTGCTT TCGTTATTCA TTAATTCAAC ATTGTAAATT	600
	GATGATGCTT TAGGAACATA TTTAGATATA TTTATTTTCA AGTCGTGAAA ACCGCCATCA	660
35	GTAAT	665

## (2) INFORMATION FOR SEQ ID NO: 625:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 625:

	GATGCCAATT AACCGTGCAT ATAATGTTGA GAAGTTAATC GAAGCAATTC AATATTATCA	60
50	AGAAAAACA AATCGTCGTG TTAATTTTGA ATATGGTCTG TTTGGTGGTG TGAATGACCA	120
	ACTAGAACAT GCAAGAGAAT TAGCACATTT AWTAAAAGGC TTAAACTGCC ATGTAACTT	180
	AATTCCTGTC AACCATGTTT CAGAAAGAAA TTATGTGAAA ACGGCTAAAA ATGATATCTT	240

	TTCGGATATT	GACGCAGCTT	GTGGTCAATT	AAGAGCAAAG	GAACGACAAG	TAGAAACGAG	360
	GTAAAGACAA	ATGCTAGAGG	CACAATTTTT	TACTGATACT	GGACAACATA	GAGATAAGAA	420
5	TGAAGATGCG	GGTGGTATTT	TTTATAATCA	AACTAATCAA	CAACTTTTAG	TTCTGTGTGA	480
	TGGTATGGGT	GGCCATAAAG	CAGGAGAAGT	TGCAAGTAAA	TTTGTTACAG	ATGAGTTGAA	540
	ATCyCGTTTT	GAAGCGGAAA	ATCTTATAGA	ACAACATCAA	GCTGAAAATT	GGTTGCGTAA	600
10	TAATATAAAA	GATATAAATT	TTCAGTTATA	TCACTATGCA	CAAGAAAATG	CAGAATATAA	660
	AGGTATGGGT	ACAACATGTG	TTGTGCACT	TGTTTTTGAA	AAATCAGTTG	TGATAGCAAA	720
15	TGTCGGTGAT	TCTAGAGCCT	ATGTTATTAA	TAGTCGACAA	ATTGAACAAA	TTACTAGTGA	780
	TCACTCATT	GTTAATCATC	TTGTTTTAAC	GGGTCAAATT	ACGCCGGAAG	AAGCATTTAC	840
	ACATCCACAA	CGTAATATTA	TTACGAAGGT	GATGGGCACA	GATAAACGTG	TGAGTCCAGA	900
20	TTTGTTTTATT	AAGCGATTAA	ATTTTTATGA	TTATTTATTA	TTAAATTCAG	ATGGATTAAAC	960
	TGATTATGTT	AAAGACAATG	AAATTAAGCG	TTTGTTAGTA	AAAGAAGGTA	CAATAGAAGA	1020
	TCATGGTGAT	CAATTAATGC	AATTGGCATT	AGATAACCAT	TCGAAAGATA	ACGTTACTTT	1080
25	CATACTCGCG	GCTATTGAAG	GTGATAAAGT	ATGATAGGTA	AAATAATAAA	TGAACGATAT	1140
	AAAATTGTAG	ATAAGCTTGG	CGGCGGTGGC	ATGAGTACCG	TTTATCTTGC	TGAAGATACG	1200
	ATACTTAACA	TTAAAGTTGC	AATTAAGGCG	ATTTTTATAC	CACCTAGAGA	AAAAGAAGAA	1260
30	ACATTAAAC	GTTTTGAACG	AGAAGTACAT	AACTCATCAC	AGCTATCACA	TCAAAATATA	1320
	GTAAGTATGA	TCGATGTTGA	TGAAGAAGAT	GACTGTTACT	ACTTAGTAAT	GGAATATATC	1380
35	GAAGGTCCGA	CTTTGTCTGA	GTATATTGAA	AGTCATGGGC	CATTAAGTGT	TGACACAGCG	1440
	ATTAATTTTA	CGAATCAAAT	ATTGGATGGC	ATTAAACATG	CGCATGATAT	GCGTATTGTA	1500
	CATAGAGATA	TTAAGCCACA	AAATATATTA	ATTGACAGCA	ATAAAACGTT	GAAAATATTT	1560
40	GATTTTGGA	TTGCTAAAGC	TTTAAGTGAG	ACGTCTTTAA	CTCAGACTAA	TCATGTGTTA	1620
	GGTACTGTGC	AGTACTTTTC	GCCAGAACAA	GCAAAAGGTG	AGGCAACGGA	TGAATGTACA	1680
	GATATTTATT	CTATAGGTAT	kGTGTTATAT	GAAaTGCTTG	TTGGTGAACC	ACCCTTTAAT	1740
45	GGAGAACTG	CAGTTAGCAT	TGCGATTAAA	CATATTCAGG	ATTCTGTGCC	AAATGTGACA	1800
	ACAGATGTAC	GTAAGGATAT	TCCGCAATCT	TTAAGTAATG	TCATTTTACG	CGCTACAGAA	1860
50	AAAGACnAAG	CGAATCGTTA	CAAAACAATT	CAAGAAATGA	AAGATGATTT	GAGTAGTGTT	1920
	TTACATGAAA	ATCGAGCGAA	TGAAGATGTC	TATGAACTCG	ATAAAATGAA	AACGATAGCG	1980
55	GTACCTTTGA	AAAAAGAAGA	TCTAGCAAAG	CATATTAGTG	AACATAAGTC	GAATCAACCT	2040



AGCCAGAAGG TACGGTGTAC GAACCAAAAC CTAAAAAGAA ATCAACACGA AAGATTGTGC 2160  
TCTTATCACT AATCTTTTCG TTGTTAATGA TTGCACTTGT TTCTTTTGTG GCAATGGCAA 2220  
5 TGT TTGGTAA TAAATACGAA GAGaCACCTG ATGTAATCGG GAAATCTGTA AAAGAAGCAG 2280  
AGCAAATATT CAATAAAAAC AACCTGAAAT TGGGTAAAAT TTCTAGAAGT TATAGTGATA 2340  
AATATCCTGA AAATGAAATT ATTAAGACAA CTCCTAATAC TGGTGAACGT GTTGAACGTG 2400  
10 GTGACAGTGT TGATGTTGTT ATATCAAAGG GCCCTGAAAA GGTTAAAATG CCAAATGTCA 2460  
TTGGTTTACC TAAGGAGGAA GCCTTGCAGA AATTAAAATC GTTAGGTCTT AAAGATGTTA 2520  
15 CGATTGAAAA AGTATATAAT AATCAAGCG 2549

## (2) INFORMATION FOR SEQ ID NO: 626:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2286 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 626:

TGCTTACTTC GCCTTCAATA CGTACTAATT CATGTCCACA ACTTGGACAA TGGGTTGGCA 60  
TATGATATGT GACAGCATCC TCAGGTCTAC GTTCTGGAAT ACTACGTACA ACTTCAGGTA 120  
30 TGATGTCACC TGCTTTTTTC ACTACAACAC TATCACC AAT TCGAATATCT CTGTCATGAA 180  
TTAAATCCTC ATTGTGCAAA GATGCTCTTG aTACAGTTGT ACCAGCTACT TTTACTGGTT 240  
35 CTAAAATAGC AGTAGGTGTG ACTACACCTG TTCGTCCAAT ACTTAATTCA ATATCTAATA 300  
ATTTAGTTAC TACTTCCTCA GCTGGAAATT TATAAGCAAT GGCCCATCTA GGAGATTTTT 360  
GTGTGAATCC CATCTCATCC TGTGATCTA AATCATTAAC CTTAATAACA ATCCCATCAA 420  
40 TATCATAAGG TAATGACTCT CTTTGGCTTG TCCATTTTTC AATATACTCT AAAACACCAT 480  
CGATATTATT TACACGCGCT CTATTTTTAT TCGTTGTAAA ACCTAATTTA TCTAACTCAT 540  
CTAATGCTTC ACTTTGCGAA CGCGCATTGA AATCAGTGAA ATCATTGACA CTATATATAA 600  
45 ATACGCTTAG CTTTCGTTTT GCCGTTAATT TAGAATCTAA CTGTCTTAAT GATCCCGCAG 660  
CAGCGTTTCT TGGATTnGCA AATAACTGCT CATCATTTTT TTCTTTTTCT TCATTTAATC 720  
50 GTAAAAATGA ACGTCTCGGC ATATATGCTT CACCACGAAC TTCTACATTT AATGGtTCTT 780  
TCATTTTCAA AGGTATCGCA TGAATTGTTT TTaAATTTTC GGTAATATCT TCACCTGTTG 840  
TTCCATCACC ACGTGTTAAA CCTTGaACGA AGTATCCATC AACATATTTT AATGATACTG 900

GTTGGTCGAA TTTTCTCAAA TCATCCTCAT TAAATGCATT CCCTAAACTT AACATTGGCG 1020  
 TGTCATGGTT GACTTTATTG AAAGAGGCTT GGGCTTCACC GCCAACTCTA ACTGTTGGAG 1080  
 5 AATCTACAGT CTTATACTCA GGATGCTCCT CTTCTATTTT AATCAGTTCA TGAAGTAATT 1140  
 TGTCATATTG ACTATCTGGT ACAGATGGAT TATCCTCTAC ATAGTATTCA TAACTGTATT 1200  
 GATTTAATAA ATCATGTAAC TCGTTCACAC GAGACGATAA ATCAGCCATC CCTTAATCCT 1260  
 10 CCTTTTTTtC AATTGGTGCA AATTGCGCTA ACAAACGTTT TGGCCCTTGT GATTTAAAGA 1320  
 TAATATCTAG TTCGATTGAG CCATTTTTCT CGTTTACATT ACTCACCATG CCTTCTCCCC 1380  
 AGGCTTTATG CATCACTTTG TCACCTACAT TCCAATCAGA TGACAATACT TGTTTTTTTCG 1440  
 15 TTGACGTTGT TCGTTGACTA AATCCGCGTT TAGCAAAAGG TTTTGCCTTA GGTTGTATCG 1500  
 TTTGTCGTTT GCCACTTGAA TGATTTTCTA ATAGTGATTG TGGAATTTCC TTTAAAAATC 1560  
 20 TGGATGGCAT ATTTGACTGA GGGCGACCAA ATAACATTCT TGATGTCGCA TGAGTGATAT 1620  
 ATAACACCTC TTCAGCCCTT GTAATTGCTA CATAACAAAT ACGACGTTCT TCTTGCATTT 1680  
 CATGATCATC TTCACTCTTA ATCGCTCTAA TATGTGGGAA TAAAGATTCT TCCATCCCCA 1740  
 25 TTATAAGAC AATTGGAAAT TCAAGGCCCT TAGCCGAGTG CATCGTCATT AGTGTTACGC 1800  
 CATTTTCAGT ATCTGCCTCA TCAATATCAG CTAATAACGA TAAATCCGTT AAAAAGTTAA 1860  
 TTAATGACTG TTCTTCTAAT GGGGTATTTT CCTCATAGTC TTTGGTACT GACATAAATT 1920  
 30 CATCGATGTT TTCTAATCTA CTTGAGATT CTAATGTATT TTCACGTTCA AGCATTTCTC 1980  
 GATAGCCAGA CTTTTGTAAT ACTTCATCAA CTATTTTCATG AATTTCATAA AATTCTTGTT 2040  
 35 CTTTTATCAA GCTTTGGATT AACTCGTAAA AATTAAGACA CTCTTGTC ACCTTTTTTG 2100  
 aCAATCCGAT AAAATCAGCT TCTCCAAGTG CATCAAACAT ACTGATATTG TTTGAAGTG 2160  
 CATAGTTTTG AACTTTTTCA ACAGATGAAG GACCTACACC TCTTTTGGGA ACATTaATAA 2220  
 40 TACGTTGCAA ACTAATGTCA TCATTACTAT TGGCAATTAT ACGCAAATAA CTTAATAAAT 2280  
 CTTTGA 2286

(2) INFORMATION FOR SEQ ID NO: 627:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 627:

TGACATTAAA AGTTGGGTGA AnAAACAAGG CATACTTTAG TTAAGCTTGA TGAAAATAAC 120  
 AATGGAATTA ATGCGATTAT TCAAAAAGAA AAAGCAAAAG ATTTAGATAT AAATTATTCT 180  
 5 GCTAAAGGTA CTACCAATTG TATTATTTAG TGGAGAATTA GACAAGCTGT AGCAGCGTTG 240  
 ATTATTGCCA ATGGTGCTAG AGCTGCTGGA AAAGATGTAA CTACCTCCTT ACTTTTTTGGG 300  
 GGCTTATGCC nTTAAAAAAG TGCCACCGTT AATGTTAAAA GCAGTTGCCA AAATGTTTGA 360  
 10 TThATGTTGC CCCAAAAGAT TTACGATGCC CCTTCCCAAA 400

(2) INFORMATION FOR SEQ ID NO: 628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 628:

AATAATTTGG GCGCTnTTTG CGTCGGGATA TTATACCGCT TCCTTAATTG TTCAACATTG 60  
 25 TAATCACTGT TTTTCAATTG ATATTTTGCA GAGTAAATTG GTACTTCTGG GTTATATGAC 120  
 ACTTCGTCCT CTTTATAGTT TTCCAATTCT TTGAAATTCC CGTATTGTAC AAAGAAGTTA 180  
 AATTCTTCGA TTTCTTTTTT TACTTTTTTCG TCATCGATTG GTTTTAATGG AATCATTTTA 240  
 30 TTAKTTTCCA TTTTCACAGG ATATCTTTTT GTATGATTGT GTGTCATTCC ATCGCTATCT 300  
 TCAACAACCTT CTCTAACAAT ATAATGCCCT TTAGCCGTTT TAGTATTTCT GTTAATTTCT 360  
 AAAACTGCTC CTCTrGATTG CAGATTTTCT CCTTTTAATT GGATTTTCAT TTCAGATCTA 420  
 35 ATTAGcCAAG TACCTTTATC ATCTtTTTtA AAT 453

(2) INFORMATION FOR SEQ ID NO: 629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1221 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 629:

TCATATGCAT TTGCAAAATA AACGCCAGAA GCAAGGTTTA GAATTGGGCC GTCCGTTTTG 60  
 50 CTCAaTTCAC TTGcATTCAA TAATTCATGC TGATCATGAT CAATTTGCTT ATCTAATTCT 120  
 GCaATTTTCT TCATTTGCTT ATCTGATTG TTTTCTTTTCG CCATCATTTG ATCACGACGA 180

GCTAATGGTA CTAATACTTT ATCTCCATAT GTGTCAATAA AGTTATAAAA ATAATCATCT 300  
 GTTTTTGATA CAAATCCAGC ACGCTCTTCA GTTTCACGAT ATAAATCTAA GAAAAGATTG 360  
 5 AACTCATCAC GTTCAAGGAA TCTGACTTTA ACACCATAGT TTATCGCTTT ATTAATATTA 420  
 CGTTTACGTT GACTATCAAA TGTCTTTTTT AATGTTTCGG GTGTTTTACC TTCAAGGTTT 480  
 AATACGCCCCA TCCATCGTAC TTGGCTCGAT GTATCATACT CAGTTGTAAA GCCATGATGC 540  
 10 TCGTAACCAT GTGATTTAAA CAAGTTTACT AGGGCATCAT TTTTCTCGCG ACCTTCAAAT 600  
 GGCACGATAT CTTTATCATA TAGATGATAT AACCAATACG GATCTAATTT AACATATAAA 660  
 15 CATTGATGTT GCTGTAAATA TTTATCTAAC TCTTTTAAAT AATAATCAAC TAATCCTAAA 720  
 TCTGAAAAAT CCATTACTGG ACCACGATTC GAATAGTAAA CATAACTTCC CATAGTAGGA 780  
 ATTTTAGAGA AAAGGCTTGC TGCAATTACT TTGTTATTGT CGTCTTTAAT ACCTAATAAA 840  
 20 ACTACTTCAA AGCCATCATT CTCACGGGTA ACTATATTTT CTTTACTTGG GAAATAATGA 900  
 CTTTCCAATG ATGGATTTTG TACAAAGTTG TCAAATTCGG TAACAGTTAA CTCTGTAAAT 960  
 TTCATGTTTT GATAATTCCT TCCTAAAAAA TTCTGTCTTT AACTTTTTTA AGTGCGGTAT 1020  
 25 ATGCTGCGTA AACAGTTTA TTAATTGGTT TAATAAGTC ACCAACATAT TCmATAATTT 1080  
 CAGCATTGTA ACCTTTTTTG AATTAACTA CACCAGCATC TTCAGCATCT TCTGTAAATT 1140  
 TrCCACTAAC ACCATAGAAA TTATAACGGT CAATGCATGA TTTAATGCAT AATTAATCAT 1200  
 30 TTCCCATGTC ACTGCATAAC T 1221

(2) INFORMATION FOR SEQ ID NO: 630:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 630:

TGGCCCAANT AACACAAGTA ATTGCTGCTA ATGGTAACAT CACAAAAAAT GAAATCGTAA 60  
 45 CTACAAATGT TAAACCTTGG AATACACCAA CCATTTCTGG TAATCGTTTA CTATAGTATC 120  
 TATTGTGAAT CCAAGTAATA ATAGCTGAAA TAATAATACC ACCTAGAATA TTCGTATCCA 180  
 50 ATGTGGCAAT ACCTGCAATT GATTTTAAAC CAGGTACATT TTCAACGCCT TTTTCTAAAT 240  
 TAGCGCCAAA CGTATGTGGC CATTGTGTTA AAATGGCATT TATAAATGTA TTAAACATTA 300  
 AGTAACCCAT CAATGCTGCA AGTGCTGCAT GACCTGGTGC TTTTITAGCT AAAGAAAGTG 360

55

TTACTGACCA AAATTTAAAC CAAAACGTAT GTTGATCTGC TAAACTCCCC ATGATTGTAG 480  
 GATTTTTTAAA TAATGTCGCA AAGCCAAGCA CTATCCCAAA GAAAGCGAAC ATTAATACCG 540  
 5 GTACAATCAT TGCCTACCG AAACGCTTTA TCGCATTTCAT CTTCTATTCC CTCCATATCA 600  
 TCTTTCCTAA CAATACATCT AATTAGATTC ATTTATAAAT AGATGTCTTA CTATTTAAAT 660  
 ATAATATATA GTAAACGCTT ACACACCTAC AACGACATTG ACGTATTTTG AAAGTATTTT 720  
 10 GTATAATCAG ATTATCTTTT CATATAGTGA AAATTTTTC ACGACCTTAT ATATGACATC 780  
 GTTGATTTTG TAATACATTC GTTTTAAACG CATAATCAAA CCTATATCAA TACACAAATA 840  
 TATATAATGA CATAACAAGAT TTTAATGTAA TAACGATCTA TTACACATTT ATTTTCAAGG 900  
 15 AGGTTGAATA TGTTTTTAGA TGAACACATT AATCGAACT TTGATAAACT TAATGATAAT 960  
 GATTTACATA TCGCTCACTT TATCAATACA CATATAGATG AATGTAAAAA TATGAAAATA 1020  
 20 CAAGATTTAG CGCAATTCAC ACATGCCTCG AATGCAACCA TTCACAGATT TACACGCAAA 1080  
 TnAGGTTTTG ACGGTnATAG TGGATTTAAA TCGTACCTTA A 1121

## (2) INFORMATION FOR SEQ ID NO: 631:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 4005 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 631:

AACCTTCCAT TTTACTTGAT CGATAACATC AGTTCTGCTT TACAAATCTC TTCATTAATA 60  
 35 TGCCTCTTAA AACCATGAAA TTTAACATGT TCCGATAAAT GATAATCTTC TACAAGTTGT 120  
 CGATATTCTG ACAAACCATT TCCATGTCCA TAAATATTCA ATTGAATATT GGGATGTTTT 180  
 40 GTTACTAATT GCTTGATTAC TTCAATTGTA TGTTTAATTT GTTTATTTTC AACGAGGCGA 240  
 GCAATTGATA TGATATGATT TTTCTCCTTT TGATTGATGT CAAATTGATA CTTTAAATTT 300  
 GCCACGTAGC CAACCGGAAT ATTGATAACT GGTATTTTAT TTTCAATATA TTGTGAAATA 360  
 45 TCTTGGCATT GCTTTTCTGT TGATACAACA ATCGCTTTAT AACGTGTAA ATTATTAAAC 420  
 ACTGTTTTAT AAAAATTTT TATACCATTA CCGGCACCGG ATAAATGTGT ACTATGGAGC 480  
 ACAACAATAA CTGGAATACT TTGATTTAAT CCCGCTATAA CATTTCTTAA TTCATGAGGA 540  
 50 CGATCTAATA TGATTTGATC ATTATTTTTA CATAATTGAT GGAGAAAATA TTGAACTAAT 600  
 TCATCTTCTG TATCAAAAAA TTGTTGATGC TGGTCTTCAT TTAAGATAAC CTTTGTGAGC 660

	TAGTAATTTT	CGAGTACAAT	CCGTTGTCCT	TCACCTAAAA	TTGAGAACA	ACTTAAAAAG	780
	CCTCTTCCAT	CATACAATTC	GCGTTTACT	TTTCTTCTTT	TATGATCAAA	ATAATTCACA	840
5	TAATTTAATT	GATGATACTG	TTTATCTAAA	AAATGAGCAT	ACATTACAAA	TTGCTCTTCA	900
	TCATATATTC	TGACATCATT	TGAATTTTCC	ACAAATTTCA	ATGTGTACCT	ACATGACTTT	960
10	TCCCAATACT	GTATCCAGTT	AACTTGCTTT	GTCTTTTAT	AATTGATTGC	TTTTTGAAAA	1020
	TAGTCATACA	TTGTAAATAC	ATCATTTTCA	ATCTGATGTT	GCTTCGCATA	TGTGTATGAA	1080
	TAAGGATTCC	ATTTAACATA	TACACATTTT	GAAGATATGC	CGTGTTGTTT	GAACAAC TTC	1140
15	AATCTATTTA	TTTGCCTTTT	TTCTACACCT	GTAATTTTAC	TTTCTAAAAT	TGTTCTTAAA	1200
	ATGTAATTCA	TATTATCGCC	TCATATAAGT	TTTATTCCGT	ATCTTTATTG	TTTATTTTAT	1260
	ATGAAAAATA	CATCTATTGC	ATGTGTAATT	ATAAAAAAAC	CAGGCCACAA	GGACCTGGGT	1320
20	CATATTGTAT	TATTTGTTTT	GTTTTTTGCG	ACGACCGAAT	AACAATAATG	AACCTAATGC	1380
	TGCAAATAAT	CCACCAAATA	ACGTTGCGTT	ATTTGAGCCG	TTATTTTCAC	TACCTGTTTC	1440
	TGGTAATGCT	TTTGCTTTAT	TGTGATGGTC	TTTAGTAGTA	CTCATTGGTT	TAACAGGTGT	1500
25	ATGTTTTCTT	GCATCCGAGT	CTGAATCGCT	GTCTGAATCA	CTGTCTGAGT	CTGAGTCGCT	1560
	ATCAGAGTCT	GAGTCGCTGT	CCGAATCTGA	GTCGCTATCT	GAGTCTGAGT	CGCTGTCTGA	1620
30	ATCTGAATCA	CTGTCTGAGT	CTGAGTCGCT	ATCTGAGTCT	GAATCGCTGT	CTGAATCTGA	1680
	GTCGCTATCT	GAGTCTGAAT	CGCTGTCTGA	ATCTGAGTCG	CTATCTGAGT	CCGAATCGCT	1740
	ATCTGAATCT	GAGTCGCTGT	CTGAGTCTGA	GTCGCTATCT	GAGTCTGAAT	CGCTGTCTGA	1800
35	GTCCGAATCG	CTATCTGAAT	CTGAGTCGCT	GTCTGAGTCT	GAATCGCTAT	CTGAATCTGA	1860
	GTCGCTATCT	GAGTCTGAAT	CGCTGTCCGA	ATCTGAGTCG	CTATCTGAAT	CTGAGTCGCT	1920
	GTCTGAATCT	GAATCACTGT	CTGAGTCTGA	GTCGCTGTCT	GAGTCTGAGT	CGCTGTCTGA	1980
40	GTCATATCT	GAGTCTGAAT	CGCTGTCTGA	TGTATCTTCT	TCGAAGTATC	CGTTATCAAG	2040
	TGTGAAATCA	TCATGATCCG	TAATTGTTAC	GTCAACTTCG	CCACCATCTG	CATCTTTATC	2100
	ATCTTCAGTT	GTATTTGTAA	CTGTTTGTGT	TAAGCCAGCA	GGCTTTTCAA	AAATAACTTT	2160
45	GTATTTACCG	CTATCTAAAT	TATCAAAGCA	GTATTTACCA	TTTTCATCTG	TTTAGTTGT	2220
	TCCAATTACT	TCGCCTTTTT	CATTTAATAA	AGTAACTTTA	ACATCTTTGA	TACCTTTTTTC	2280
50	AGTTGAATCT	TGTTTGCCGT	CTTTATTACT	GTCGTACCAA	ACATAATCAC	CTAAACTATA	2340
	TTTTGGTGTT	TTATAGAAAC	CACTGTCTAA	TGTCATGTTA	TCTGCATCTT	TAATGACACC	2400
	TGTTGTTGTT	AAACCATTAG	AATCTTTTTT	AGTATCATTT	CCAGAAGTTA	CTGAAGTTGG	2460

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TTGATATTTA CCATTTTCAT CTGTTGTAAC TGTTTTTAAA ACTTTGTCGT TTTTCATCTTT 2580  
 TAACGTAACT GTTACACCTG AAATGCCCTT TTCATCTTTA TCTTGAACAC CGTTTTTATT 2640  
 5 TGTATCTTCC CATACATAGT CACCTAAGTT GTAAGTCGGT TTGTAGAAAC CAGAGTCAAT 2700  
 AGTATCGTTA TCTTTATCTT TAATGACACC TGTTGTTGAT GTACCATTG AATCTATACC 2760  
 10 TTCATCAGTT CCTGAACCTA CTTGTGTTGG TGTGTAACCT GATGGTGTTT CGAATTCAAC 2820  
 TTTATAAGTT CCATTTTCTA ATCCAGTAAA TTGATATTTA CCATCTTTAT CTGTTTTAGT 2880  
 TGTTTGTAAC ACTTCACCGT TTTTCATTTTT CAATGTAAC GTTACGCCTG AAATACCTTT 2940  
 15 TTCAGTTGAA TCCTGCTTAC CATCTTTATT TGTATCTTCC CATAcataat TACCTAAATT 3000  
 ATATTTTGGT GTTTTGTAGA ATCCACTATC TAATGTCATG TTATCAGCAC CATTAAATAAC 3060  
 ACCTGTTGTT GTTAAACCAT TAGAGTCTTT TTCAATGTCG CTACCAGATG TTA CTG TAGT 3120  
 20 CGGTGTATAG CTTTCTGGTG TAGTAAATTC AACTTTTATAA TTACCATTAT CTAAATCAGT 3180  
 AAATTTATAT TTGCCATCAG CGTCTGTTGT AACTGTTTTT AaCagTTACC GTTTTCATCT 3240  
 TTTAATGTTA CCGTTACGCC AGATATACCT TTTTCATCTT GGTCTTGGAT ACCATTTTTTA 3300  
 25 TTTGTATCTT CCCAGACATA GTCACCTAAG TTGTATTAG GTTTGTAAAT ACCTAAGTCT 3360  
 GCAGATAAGT TATCTTTGCC ATTAAGTGTATAAATACTGAAG ATAAGCCGTT TGAATCTAAT 3420  
 TCTTCGTTAT TACCTTGTTT TGAAGGGGTT ACTTCATAAC CTTTTGGTAA GTTTGAAAAT 3480  
 30 TCTACACGGT AATCTCCATT AGGTAAGTTT GGAATCAAGT ATGACCCATC TTCTTTAGTA 3540  
 ACTGCTTCTC CTACTTTTGT ATTTGTATTA TTATCAAATA CAGTTACAGT TACATTGCCA 3600  
 ACGCCTTTTT CTCCTAATTC TTGAACACCG TTTTATTAG TATCTTCCCA TACGTAGTTA 3660  
 35 CCAATTTTAT ATACTTCTTG ACCAGctCCG CCACTTTGGT TATTAGTAAA TCCTAAAGCA 3720  
 TTGCCAGTAG AAACGGATTT ATTACCTGTT GAAGATAAAG TAGCCATTTG AACAAGTGTT 3780  
 40 GGGCTTTTCGC TATTTGTATA TTGGAATTTT GTATTAACCA TTACAACATA AGCAGAATCT 3840  
 GCATTTCCAA AATCAATAAC AGCGCTATTG TtGTCGCCAT ATGTAATTTT CTGCAAGTAT 3900  
 TGATTTGTTA CATCTGTAAG CTCTTTAGTA TTCACATCGT ATCCTTTATT TAATGTATAA 3960  
 45 CCTTTAGGAA CTTGATATAT TTTTATATCT GTTACATCTT TATTT 4005

(2) INFORMATION FOR SEQ ID NO: 632:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1440 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 632:

	TATTAGGTTA CTCTAGTTTC CAAAGCGGGA ATTTTAATGT TATTAACAGC AAGGACAGCA	60
5	AAAGCAATAT CGGCGCATTG ATTGAAAATC CAGGAATATA TCCTTTTATG TCTGGATATG	120
	AAAAC TTGAA GTTATTGAAT GAATCAAAAA ACACTCAAGA TATCGATAAA ATTGTCTCAC	180
	AACTTCATAT GGATGAATAC ATTCATAAAA AAGCTAAAAC GTATTCTCTT GGTATGAAAC	240
10	AAAAATTAGG AATTGCTATA GCATTTTTAA ATAAACCTCA ATTCATTATC TTAGATGAAC	300
	CAATGAATGG CTTAGATCCA AAAGCTGTGC GAGATGTACG TGAATTGATT GTCCAAAAAG	360
15	CGCAAGAAGG TGTTACTTTC TTAATTTTGA GTCATATTTT AAGTGAATTA GTTAAAAATCA	420
	CAAAC TCTAT CCTTATTATT AACAAAGGTA AAATTGTTAC AGAAACATCG GAAGAAGAAC	480
	TTAAACAATT TAAAGATAAT GATTTAGAAA ATGTATTACT AGAAATCATA GAAAGGGAGG	540
20	ACCAAGCATA AAATGGGAAC TTAAATTAAA CAAGAATGTT TCAAATTATT TAAAAAGAAA	600
	TCAACTTTTA TCGCACCTAT TGTCTTTATT CTACTAATGG TTGCTCAAGG TTATATTGCT	660
	ACAAAATACA ATGAAATTTT TACGCCACAG GAATCTTTCA CATCTGCTTA TAATGGTTTT	720
25	TCATGGTTTG CATTTTATT AATTATTCAA GCAAGTACAA TCATTTCAAT GGAATTTTCA	780
	TACGGTACGA TTAAAAATTT ACTCTATCGT GAATATTCAA GAACAACTAT GATTGTTAGC	840
30	AAAATCATCA CATTATTTAT TATTTCTTTA ATTTATTTTG TTATTACAAT TATTGCTTCA	900
	ATTGTTATTG GGTCTTTATT CTTAATGAT TTAAATATAT TTGAAAGTAG CGGTAATCAA	960
	TTATCTTTAT TGAATCAATT ATTATTAGTT AGTTTAGGCA CATTTGTTGG CGTTTGGTTA	1020
35	GTTTTAAGCT TAACGTTGCT ATTATCATCT GCAACAAATT CAACGGGAGT AGCCATTGCT	1080
	GTAGGTATTG TTTTTTATTT TGCAAGTTCT ATTTTAGCAG TTATTCAAAC GGCACTTTTA	1140
	GAAAAAATAG ACTGGCTAAA GTGGAATCCT ATTAATATGA TGAATATTAT GCTTCAAACA	1200
40	GTTGAAAAAG GCTTTAGTAA GTCGACAAAA TTAGAACTTC ATGAATTGTT TATTGGTAAT	1260
	ATTGCTTATA TTTCTATTTT CTTAATACTT GTAGTATTTA TTTTCAAGAA GAAAAATATT	1320
	TAGTAACTTA AAGTATTAAA TGTCTAAATA CACACATATT CCATCGTAAT TCAAAATCAT	1380
45	TTTCAAATCC CTTCAACCAA ATAATGGTGC GGGGATTTTT TCATCCAAAT TTTGGAAATT	1440

## (2) INFORMATION FOR SEQ ID NO: 633:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 633:

	GCTGACATAA TTGCATCAAA TTTCACATCC CCATAAAAAT CGCTACCACA TAACCTACGA	60
5	TAATACCTAC AAGAACTGGA ATTAAAGATA GGAATCCTTT AAAAAATCCT TGAACGACTA	120
	TTGTTACAAG CAAGGTTATC ATTGCAACAA TTAAGAACT GATATTGTAA CCTTTCATAT	180
	CTCCAGGATT TTCATACATT GCCATATTGA CTGCAGTAGG CGCTAAGCTT AAACCAATTA	240
10	CCATGATGAC TGGTCCAACA ACAACTGGTG GTAATAATTT CATTAAACCAT GCTGTCCCAC	300
	TTAATTTGAT TAGAATCCCG ATGATGACGT ACATAACACC ACTCATGaAT AATGCTACAA	360
15	GCGTGTCTCC TAAGCTATGC GTACTTAATC CCGTGATAAT TGGCGTGATA AATGCAAAGC	420
	TAGATCCCAA GTATGCTGGT ATTTGCGCCT TCGTTATTAA GATATAAAGT AATGTACCGA	480
	TTCCCGAAGC TAGTAACGCT GCTGATATTG GTAGTCCTGT TAAGAATGGT ACTAGTACTG	540
20	TTGCGCCAAA CATCGCAAAT AAATGTTGTA AGCTTAAAAA TGCCCATTCG GCTGGTTGTG	600
	GTTTTTCATT TACATCTAGT ACGGGTTTTA CTGTTCTGTC AACATTTCA TCATTTTGCA	660
	TAATATTCAT TTCCTCCGAT AATAAAAAAA TCTCTTTACA TCAGTATATG TAAAGAGACA	720
25	AAAAGTGTGA CAAGTTGCTA CAAGTCATTT TCGTCCATAG AAATTGACTT ATAGTTGTCTG	780
	AACATGAGGG TATTATTAGA TAAACAAGCA TATGAAACT TATTTATCAT TCAACTCCCC	840
	CACCTTTTTTC AGTCTCTCGT ACTGAATTAA AAGGGGtATT ATTTAATTAT AACTGCATTT	900
30	CTTTGATCCa TTtCTTCyAA ATAGACACTT ACCGTTTCCT CTTTAGAAGT AGGTAWATTT	960
	TTACCAACAA AATCTGCTCG AATTGGTAAC TCACGATGTC CTCGATCAAC CAAAGCAGCT	1020
35	AAACCAATTT TAATAGGTCT AGCATTTAGC AAAATAGCAT CAAGTGAAGC ACGAACCGTT	1080
	CGACCAGTAT ACAGCACATC GTCAATAATG ATGACTACTT TATCTGTAAT ATCTGTGTCTG	1140
	ATGTCTATTG CGTCTTTTGT CGTAAGTGAT GACATGTGcT CTATATCATC TCTAAAGTAT	1200
40	GTAATATCAA TTGTTCCAGT AGGTATACGT TGTGCTCAA TTTGATGAAT TTtATCTTGT	1260
	ATACGATTCTG CTAAATATTC ACCTCTTGTh .TTGATACCTA AAAGATTAAA TTATCAGTAC	1320
	CTT	1323

## (2) INFORMATION FOR SEQ ID NO: 634:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 761 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ACCCATCTCA TCGTATTTTG AATTTAATAG ACGAGATCGA TGTATATCTG AATTCATCCC 60  
 AACTATGGAT TAATGTTGGT ACATCATtAA cGCATAACCA ACATTTTGAG CAGTTGTTTT 120  
 5 ATAAGTAACG TGATTTTTAT CTAATTGCCC TCTTAATGCG TCCTCTGTAA ATTCAACACT 180  
 ATCAGAACCA TTAGAGGTCG CTTTCATATAA GTTATTAGAT GCAATATGTG CTAAATCGCT 240  
 ATTGATTTTC AATGGTTTTA ATCCTTTTAA TTTTCTCATT TCATTCGTGA CTTCATAAAG 300  
 10 AGAAATTAAT TGATTTGGAT TTTGCTCAAC TGGACGCTTA TTATGCTCTT CTGACGTAGA 360  
 ATTAGAATTT AATTGATAAG GTTCAATATC TGCTAACATT TCTTTTGTTA AAAATCGTAC 420  
 ACTTAGCACC TTTTTCGATT GTTGATCAGA ATACACTTGT GCATATATGT CGCCATATTT 480  
 15 AATCaGTGTT TGTGTTTTTA AATCTTCATC TGAAAGTTCA AATTCATATT TTTTACCATC 540  
 AACTTTAAAG GACGGTTCCTG GATTAATACT TGTATGATTA AAAATTTCTG CAGAATGTTG 600  
 20 TCCTATTTTT AACGGACTAA CATTGACTTT CTCACCTGTA GCATACACTG AAACGATTTT 660  
 TTCACGTTTA GTTGAAACAA TGTAATAACT GTTTTTGTCT TTAAACACAT AATTTTTGTA 720  
 rCCATCTCTA AAAGGGTAGA CrCGATCTGC TTGTCCAAT T 761

25 (2) INFORMATION FOR SEQ ID NO: 635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 635:

nTAAATATAT TTATATATTA TAGAATAGAA AGACCTGAAG ATTGAATATC TTTCGCAAAG 60  
 CCTTTAACTG TATCTACTGA TAATTCGTGA ATATCGCGAC CTAAGTTTGT ATTCACTTTT 120  
 40 TTCACAACAT CTGCTGGGCA TGTAATAATA TCTGCACCAA TTTCATCAGC TTGAATCACA 180  
 TTGAATAATT CGCGGCAACT TGCCCATAAAT AATTTAACGC CGTCTTTACT ATGCGTAACT 240  
 TThACAGCCT CTkTCATTAA TGGTaATGGA TCTACGCCTG TAtCTGCAAT ACGTCCTGCA 300  
 45 AATACTGAAA CATATGTTGG CACACCTTCA GTTACTGCTT CAGTTATTTT TTTAACTTGT 360  
 TCAATTGTGT AAACAGCCGT AACGTTTAAT CTCACATTGT CAGCTGAAAG TTTTTTAATT 420  
 AAAGGAATCG TTGATTCACC TTTTGTATTT ACAATAGGAA TTTTAACAAA TACATTTTCG 480  
 50 CCATATTGTT TTAAAATTGC TGCTTCTTTk TCCATAGTTT CTAAATCGTC TGCAAATACT 540  
 TCAAATGAra TTGAAGCATC TGGAATTTCT TTCACAGCTT CTTCAGCAAA AGCTTTGTAA 600

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TTTTTATAAG CTGCTTTCAT TnCTTCAATA TCTGCACCGk CCGCAAATAC TTCTACATTT 720  
 AGTTTAGCCA TATAAyATAG CCTCCTTGAT TCTTATTAAA ATTTTAACAA CATCTGCATG 780  
 5 kCTTTTTCTT ACAACCATTT GTAAAAAATG ATTTTATT TTtGTT 827

(2) INFORMATION FOR SEQ ID NO: 636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1478 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 636:

TTAGTCGGTA TAACCATCGG CTAGGTGGTT TTTGTATTAA AAAAGTGGAT aCCAAAAATTT 60  
 20 ATTAATAATT ATTTTAATGT TAGAAAAAAA CTAAATAAAA ACTCGCTAAT GATATCCAAT 120  
 AATATGTATA CAAAACGAGA CATATATTGC ATATGATTAA CGAGATACTG AAAATATTTT 180  
 ATCACCCTTA AAATGATTAT TCATTTTCAG CGGTAATTCG ACCTAAAGTC AAACCTACAA 240  
 25 TAAAACCGAT GATAAATACT ACTAATGAAA CGAACCACAT CACGATATTA GTTGGTAAAC 300  
 CTGGAAATAC TGCAAAGAGG GAGCCAACAA CAAAACCAAT GATTAATGCA AAAGTCATTA 360  
 GTTTATGATG TGTTAGGAAA TACTGGATAA TTTTGCTTGA AATAATGAAT CCAGCAAGCA 420  
 30 CGCCAAATCC GACTGCAAGT AATATAGGAA GACCTGCAAA GTTAAGTTTA ACAACTTCAG 480  
 ATATTGCTAG CATGACCGTA CCATAGACGC CAAATACTAA TAACATAAAT GACCCTGAAA 540  
 TACCTGGGAG TAACATAGCA CTAGATGCAC ACATACCTGC AATAAAATAT TTAATAATAA 600  
 35 GACTAGTTGA TAGAGTAAGT GTTCTCCAG CATGTTTATC ACCATTATTC ATTAATGTAA 660  
 TAACAATTAA GATAGCGATA CCAGCTATAA CCATCATGTA ATGTYTAGTT GTAAATGACG 720  
 40 TTTTATAGTT AGAAATTTTC AATAAATATG GAACGATACC AATGATTAAT CCACCAAAGA 780  
 AAAACATAGT TGGAATATGG TGTGGCTTA ATAAATAATT AAAAAGATTA CTTAGTGATC 840  
 CCATTGCCAG TAACATTCCA ATTATAATGG GGATTAAAAA TGTAAAACTT GGCCAAAAAC 900  
 45 GTCGTGAGAA TATGCCGCTA ATTGAAGCGA TAAATTGATT GTAAATACCT AACATAATG 960  
 CGATAGTCCC ACCGCTAACA CCAGGTACCA AGTCACTCGT TCCCATAGCA AAACCTTTTA 1020  
 GAATATTAAT CCATTTAAT TGTGTCATGA ATAACCTCTT TCAAACGATT GGAATAAAT 1080  
 50 CATAAATAGC ATCATACCAT ATTACAAATG TCCTAGTGAA ATGATAACAT ATTTTAAATT 1140  
 CATAAATCC ATTGAGAAAT TATGTGCACT TATTATCATT TATATTTTTA AAGAGAGCGG 1200

AGGTATAAGT AAGTTATAAT TAACTGAACG CATTATTACA AAGTCTTTTT GACTACAAAT 1320  
TAAAATTATT ATAAACTAGT TAAGAAAAC TATATTTT CGGAGGGAAT ATAAAATGGC 1380  
5 ATCAACATTA GAAATyAAAG ACCTACATGT GTCTATTGAG GATAAAGAAA TCTTAAAAGG 1440  
TGTTAACTTG ACAATTAACA CTGATGAAAT ACATGCGA 1478

(2) INFORMATION FOR SEQ ID NO: 637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1995 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 637:

20 ATTACAGCAT CTTCTCTAGG TAGATTATTA AAAGATAGAG GTCTAAATGT AACAAATTCAA 60  
AAATTCGATC CATACTTAAA TGTTGACCCA GGTACAATGA GTCCTTATCA ACATGGTGAA 120  
GTATTCGTAA nGGATGATGG TGCAGAACT GACCTAGACT TAGGACATTA CGAAAGATTT 180  
25 ATTGATATTA ATTTAAACAA GTTTTCAAAT GTGACAGCCG GTAAAGTGTA TTCACACGTA 240  
TTGAAAAAAG AACGTCGTGG TGATTACTTA GCGGGAACAG TTCAAGTTAT TCCGCATATT 300  
ACAAATGAAA TTAAAGAACG TTTATTACTT GCAGGGGAAA GTACGAATGC AGACGTTGTT 360  
30 ATCACTGAAA TTGGCGGTAC AACAGGTGAT ATTGAGTCAT TACCGTTTAT TGAAGCGATT 420  
CGTCAAATTC GTAGCGATTT AGGTAGAGAA AATGTTATGT ATGTTCACTG TACATTACTG 480  
CCTTATATTA AAGCTGCTGG AGAAATGAAA ACGAAGCCAA CACAACATAG TGTTAAAGAA 540  
35 TTACGAGGCT TAGGTATTCA ACCAGACTTA ATCGTTGTAA GAACTGAATA TGAAATGACA 600  
CAAGATTTAA AAGATAAAAT TGCATTATTC TGTGACATTA ATAAAGAAAG TGTTATTGAA 660  
40 TGTCGTGATG CAGACTCTTT ATACGAAATT CCATTACAAT TAAGCCAACA AAATATGGAT 720  
GATATCGTTA TTAAACGTTT ACAATTAAAC GCGAAATATG AAACACAGCT TGATGAATGG 780  
AAACAGTTGT TAGATATCGT TAATAATTTA GATGGTAAAA TTACAATTGG TTTAGTAGGT 840  
45 AAATATGTTA GCTTACAAGA TGCATATTTA TCAGTTGTTG AATCATTGAA ACATGCTGGA 900  
TATCCTTTTG CCAAAGATAT TGACATTAGA TGGATTGATT CAAGTGAAGT AACAGATGAA 960  
AATGCAGCCG AATACCTTGC AGATGTCGAC GGTATTTTAG TACCAGGTGG ATTTGGTTTC 1020  
50 CGTGCAAGTG AAGGTAAAAT TAGTGCAATT AAGTATGCTA GAGAAAACAA TGTACCATTTC 1080  
TTTGGTATTT GTTTAGGAAT GCAACTTGCA ACAGTTGAAT TTTCAAGAAA CGTATTAGGC 1140

TTACCAGAAC AAAAAGATAT CGAAGATTTA GGTGGTACAT TACGCTTAGG CTTATATTCA 1260  
 TGTTCAATTA AAGAAGGCAC ATTGGCACAA GATGTTTATG GTAAAGCGGA AATTGAAGAA 1320  
 5 AGACATCGTC ATCGTTATGA ATTTAATAAT GACTATAGAG AACCAATTAGA AGCAAATGGT 1380  
 ATGGTGATTT CTGGTACAAG tCCAGATGGA CGTTTAGTAG AAATGGTAGA GATTCCGACA 1440  
 AATGtTTCTT TATTGCTTGT CAATTCCACC CAGAATTCTT ATCTAGACCA AATCGTCCGC 1500  
 10 ACCCGATTTT TAAATCATTT ATTGAAGCTT CATTAAAATA TCAACAAAAT AAATAAATTT 1560  
 GCTAATAAAA CCGGTACTTT CATTGTtAAA CATTGAAAGT ACCGGTTTnT CGTATAATTT 1620  
 15 TAATATTATG TTAGTGACAA GGTATGAAAT AACAATAGTG ACTTTTATAA TTCTAAGTCT 1680  
 CTTGTCATTT CAATCATTTG TGTATAAATG TCATAGTATA CATAATTCAA TGCCATCGCA 1740  
 TGTGGTyGGA CAATCTTATC GTAATCTTCA GTGTAGACTA TAGGTcTTGG TGTAGATAAA 1800  
 20 TCGATAAAAT GTACGAGATG ATCAGGGAAA TCATCTGTTT TAGGTTTGTG GCTTATTAAAG 1860  
 ACCACATCGA TATCTAAGTC GATAAGTTTT TGAATATCTA ATGCAACTTG ATyATTATAA 1920  
 AATGGTGCGA ATAATAATAC ACGATCAGTT GAGTCAATTT CTTTAawkTC TTTAATAGCG 1980  
 25 TaAGTTTnCG GCTAG 1995

## (2) INFORMATION FOR SEQ ID NO: 638:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 638:

ATTAGTGATG AAAGTCAGAT TGAAGCTTTA TTAACAGCTG AAAAATATTC AGAAATGATT 60  
 40 GGTGAATAAT CACCGTGTA CTCCTTAATC TAAGATTGAG GAGTTTATTT TTAGTCTGAG 120  
 AAAATAAATG ATATGAAAGA AAAATTATTA GGTACTATTA TTTGGAGTAT TGCTACATTT 180  
 45 TATTATTCAA GAATGATGGA AATAATGAAT TTAGCTATTT TAAAAATAAA AATTGGGGGA 240  
 AGTTAATATG CTAAACATTC AAGACGTTAn CATnCTTTCT AAAAAGGAGC AAAAAGCATA 300  
 TAACCGTTTC GTAGAATCTG TAGAAAACGG TAATTTACCA GTACTACCAT GTATTGAAAT 360  
 50 GGATCTAAAA GAGATGCAAG AAGAAACATT AAACCAGAGT AAGATTGGTG GAATGCCATT 420  
 TTTAAAATCT TTAAAGATA TACCATTAGA TGAAAATAAT GTACCAATGG TATTGCTAGC 480  
 ACAGATTAAT TTGGATGATC TTCCAGAACA ACAAGAATTA TTTCCTGTAA AAGAAGGGAT 540  
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	AAACAATATA AACTCAAGGC TTGTTTATAT AAAAGAGCCA ATTACAGATT TATCACTCGA	660
	AAATATTCAA GCGCATTGA AGTCATTAGA TGCTGATAAT GAGGATATCC CGTTCAGTGG	720
5	AGCATTCTCT ATAGAATTTA GATTGTCGAA ACAAATATT ACATGTACTG ATTATAAGTA	780
	CGATGAGGAC GTGCTTGCAT TGTGGAATAA AGTCAATCCA TCCTTCGCGC TAAAATCAAT	840
10	GTTTGGTGGT TATGATGAAT TGATGGAACC TGTGTGTAmC AyWTTTACTG CTAAGgAACC	900
	ATTTAATCAA CTTGGTGGTT ATCCATATTT TGACCAAATA GATCCAAGAA CGAACGATcA	960
	AGAACTGAAA ATGTATGATA GAGTCTTACT GCAAATTGaT TCTACAAGAG ATGGTAATTC	1020
15	TTCGATTATa TGGGGTgaTT TAGGTATTGc CAATATctTA GTGaAATCTA CTGrACCTTG	1080
	aGGcTAtGaa GTTTTGAATG ATTACCT	1107

(2) INFORMATION FOR SEQ ID NO: 639:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 904 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 639:

30	ATTCATATTA TTATAAATTA TTTCTACACC ATCCCAATTG AGTTGTTTTT CATAATTTAA	60
	ATGTAATTCC ACTAACTCCC TACCAATTTT AACAAATCCA TATACATCCT TTAATATCGG	120
	TATTCGCGGA AAACCTTTAC TCAAATCACT TGAATATTG TTCACATAAT ATTTATGATG	180
35	CAAAATTGCA TATATATAAT ATACTATCTC TTCTGAATTA AGATTTATTT TCTTTTAAA	240
	AGAATTAGgA AATATTATCT ACaTGCCTCA AACTATCTTT ACCTTTGtAT GTAGCAAAGC	300
	CTTkGCCATT ACCAATAAAc TGGAAATTAG GTAATATGTC CGTGATCATA GCCGAGAATT	360
40	CTTTATTcAT TCCCTGTCCT TGTATATAAA TCACCTGTCC AGTATTCTCC ATTATATTAT	420
	AATATCTACT TGGCATTTC ATAATATTTT TGTCGTACAC TATCCATTTT TTTGTAAATG	480
45	GTCTATGCAT AAATTTAACA ATTCTCTCTG GATTAATTGA AATATTTTTT CCTTTAGAAA	540
	ATTTTTGGGT AAGTCCTCGT GTCCAACTaA TaAATGTTTC ATCTTTGTTC ACTAAATTTA	600
	TACGTTCTCT TGAATCTAAG ATATCAATTA ATCTATCTAT TTCAGAATTA TAGTTATCTA	660
50	CAAGTAATTT TGcATTTACT AATGCTTTTT CATTGAAAA ATTTGTTACC CAATTATCTC	720
	TTGCTGaATT TACTCCATTA AATkGAKCTA AATATATAGA ATTTTCAATA TCCTTGGAAT	780
55	CATACATTGG TAAATAATTC CCCATAGTTT ATGTCTCGGT GATTAATCCA ATCATTGGGG	840

AAAG

904

## (2) INFORMATION FOR SEQ ID NO: 640:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 436 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 640:

CGATGTCCTTT ACTATTAGAC TTAGCCATTG GTTTCACCTC TCCAAAAATT GTAAATGTGT 60  
ATCATCAATA TGAAAGTTAC ATAAACTGA CATATTTCTT TAAATATCA ACGCCATTGA 120  
TAACTTCCTG TTTTAATTGA TACGCTGTAA CAAATACTA TAGTTAGTGC TTACATGTAT 180  
ATGTTAAAGC AAGCAGTGGT AAATGTAAAT TATAATTATT CATTAACTTT GCAATATATT 240  
AAATCTTTTA TTCATAGAAG ATAAATATCA AATCAATCAT AATTATTTGA CAACAAATAG 300  
CTAACGATTG TTTTAATCTA CATTTGGCTT ATAGCATTTT AAACCTATAC TCTATTTTGA 360  
TACAATATAA GTGTAAAATC AATCATAAAA AGGATATTCA ATATCTGCAT CCAAGAAAAA 420  
CATTACAATT ACCTTT 436

## (2) INFORMATION FOR SEQ ID NO: 641:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 442 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 641:

GTTATTAAAT TCAGAGTGGT AGCAAATTAA AGTTANTCAA GAGTTAAGAT GAATTTAATT 60  
CATGAACACG TCTATTATTT TTATAATTGT AGCAAATAAA GCTTTACATC AAGGAGGTAA 120  
TTAAATATGT TCAAAAAATA TGACTCAAAA AATTCAATCG TATTAAAATC TATTCTATCG 180  
CTAGGTATCA TCTATGGGGG AACATTTGGA ATATATCCAA AAGCAGACGC GTCAACACAA 240  
AATTCCTCAA GTGTACAAGA TAAACAATTA CAAAAAGTTG AAGAAGTACC AAATAATTCA 300  
GAAAAAGCTT TGGTTAAAAA ACTTTACGAT AGATACAGCA AGGATACAAT AAATGGAAAA 360  
TCTAATAAAT CTAGGAATTG GGTTTATTCA GAGAGACCTT TAAATGAAAA CCAAGTTCGT 420  
ATACATTTAG AAGGAACATA CA 442

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 642:

CCAATTTTGG TATGAATTAT ACAGATAATT CnGCGCCCGG AGGATCATT T GCTTATTTAA 60  
 ATCAATTCGG TGTGGATAAA TGGATGAATG AAGGGTATAT GGCATAAGGA GAACATTTTA 120  
 ACTACTGCCA ATAACGGAAG ATATATTTAT CAAGCTGGAA CTTCATTAGC CACACCTAAA 180  
 GTTTCGGGAG CACTAGCTTT AATCATTGAT AAATATCATC TTGAAAAACA TCCAGATAAA 240  
 GCGATTGAAT TGTTATATCA GCATGGGACA TCTAAGAATA ATAAACCATT TAGTAGATAT 300  
 GGGCATGGTG AGCTTGATGT GTATAAAGCA TTAAATGTAG CAAATCAAAA AGCAAGTTAA 360  
 TAAATCAAAG GAGTTTTTGA TTATGGCAAA ATTAGTTACT GAAAACATTT CGAAGCGGTT 420  
 TAAAAATCAA GATGTATTAA AGCATATTAA TATCACTTTA GAAAATAACG AAGTTTATGG 480  
 ATTACTTGGT ATTAATGGAG CCGGTAAAAC GACACTTATG AAAATTATAT GTGGCATACT 540  
 TCAACAAGAT TCAGGGGAAA TTAAATTAGA TAATAGACCA ATGACACGAA ATGATTTGCA 600  
 CAAAGTTGGT TCGCTTATTG AAACACCTGC GACATATAAT CATTTAAGTG CACAAGATAA 660  
 TTTGAAAATT GTGTGTTTAA ATGAAAGCGT TGATTTCaGC GAAATTAATA GTGTTTTAAG 720  
 CTTAGTCAAT TTAAATGTCTG ATAAAAAGAA AAAGGTAAAG GACTTTTCTT TAGGTATGAA 780  
 ACAAAGACTT GGAATTGCAA TGGCaTTAAT TAAAAaGCCA GAAATTTTAG TATTAGACGA 840  
 ACCATCTAAT GGTTTAGACC CATATGGAAT CCAAGAACTT AGAGAACTTC TAAAATTATT 900  
 AACAGAACAA GGTACTAGTA TTATTATTTT AAGTCACATT TTATCTGAAA TCCAAGTTTT 960  
 AGCAGATCAT ATCGGTATTA TTCATGAGGG TGAGCTAAAA TATCAGCAA GAAATAACAA 1020  
 AGATGAAAAC TTAGAAGAGA TATTCTTCAA AATAACGAAA GGTGATTACA AATGATACAT 1080  
 TTAAAGATaG AAGGTATCAA ATTTAAAAaT TCTTTCAGTA TGTATGTTTT ATTAATAAGT 1140  
 CcGcTGGTAT TTCTTTGTTT TGCTATTTTC ACAGTCTTAT TCGCCAAAAG TAATACGGGA 1200  
 ACAGCGAATA GTGTGTCACC ATATATAACT TTAATTATTA ATATTTGGCC AATTGCTTTC 1260  
 ATCCCGATIG TATTATGTAT GGCTTGTAAT TCGTTATTTA AAATTGAAAT GAGAAATAAA 1320  
 TCATTTAATT ATTACTTAAG TAATAATTGG TCGATTACAA AAGAAATAAG AGCAAAGATT 1380  
 TTCATTTTAT CAATAGCATT TTTGGTACAT TGCTTTTATAG TATTTATTAT TGCTTATATA 1440



TTGATGTATG TAGTATCTCT ACCATTGATA CCGCTCAACT TTTTATTAAC TCGATACTTT 1560  
 GGTGTGTTTCG TATCAATATT AATAAACTTA GTATTATCAG TCATTTGTGT CTTGTTTTTA 1620  
 5 ACATTGAAGA GTTTATTTTG GGTGTTGCCG TGGGGGATAA TGCAGAGAAT CCCGCTTATT 1680  
 ACGCTTGGTA TACTACCTAA TGGcTTAGTT GTAAACCATA ATTCAAAATA CTTTAATGAT 1740  
 10 CTCATGCCT TATATATTTT GATTATTGTT AGCATCATT TTTTCGCGAT AGTAACATTT 1800  
 TTAAATAATA AGAAAAGTTG GCGATTAAAA TGATAATTAA CGAATTAAAG TCATGTAAGT 1860  
 TGAAATTTTC TAAGCAAGCG CTCACATTTG TACCCATTAT TGTAACCATA TTGTTTATAT 1920  
 15 TATTTATAAA TTGGTATTTA AACGTAAATT TATGGAATGG TCGACAAATm AGTTTGTTTA 1980  
 CAGCGAGTTT TAATGCAATT ACATCGCTAT TAATTTCTAT AAACGTCTAT CAAGTTATCA 2040  
 ATTTTGAAGA AAATATTGGT CACTTTAATC ATATTTTAGG AAAAGCTAAT AGGCTAAATT 2100  
 20 GGTAAATGC ATCAATGATT TTTACTTATA CTATTACAGC CATATGTATT CTATTAGCAT 2160  
 CAATTAATTT ATTGTGGCAT TCACATGATA TGAAAATAAC ACTTATGTTT ATAGGcGTaT 2220  
 CATTGTTTTT CAATGTaATT ATATTACTGC TACTTTTTAT TTTTAGTATT TTCATTAAAG 2280  
 25 ATGTAATGGC TATTGTTGTC GGAGTTTAA TGTTTATTTT TAACGTTTAT TTTGGATTAG 2340  
 AAGTGCTTGG AGATCATTCG TGGTCTATT TACCAATCAC ATATGCTACA CGTTACGTTT 2400  
 ATATGTTTAn CGAAGGGGAG TATACCAGTT ACATTAACAT TGGGCAATCT ATATnATTAT 2460  
 30 CACGnTGCCG AT 2472

## (2) INFORMATION FOR SEQ ID NO: 643:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 646 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 643:

45 ATAATATAGG AATTATTTTCG ATnACAGATT TTACGAATCG TGCTACGATG CAAAATGAAn 60  
 ATAAAGATCC ATATGGCGAA AAGTTAGCTT ATGGAATTGC TTTTAATGGC AGTGTGGATA 120  
 TGCAAGGGGA TAAACAAGTC ACAATTCCAA AATATAGTGT AGTTACAATT ACTGGCGAAA 180  
 50 ATAGTAAAAA TTATCGTGTT ACCGCCGATA ATAAGACTTA CTATGTTAGT AAAGATAAAT 240  
 TAGAATATTT TAACCCGGCA GGTTTATATC AAACGCATAG TTTTAAAAAA TTAGCACCAT 300  
 ATATGAAATC AAATTATAGT AATTACTATG CATACTTTAA TAGTCAATTA CATAAAAAGC 360

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CACAACAACC GATACAATTA CTTTTCATG ATAATAATCA GTTATACGGT TTTGTTTATC 480  
 CAATTGTAGA TAAAAAGAA TTAAAGATA AGTTTAATAT TAACAATAAC ATTTGGATTA 540  
 5 CTAAAGTTGG GAATGGATAT TGTATTGCCA ATTTGAAAGA AGACAAATGG ATTTATATTG 600  
 AATTGTAGGT GTAAAGATGC TAGATAATAT TATTTTATAT TTTAAA 646

(2) INFORMATION FOR SEQ ID NO: 644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 644:

20 TAATATCGGA ATTTGATAAT GAAGATATCT AATTTTTTAA TATTCGTAGC TTTTATTTTT 60  
 CTACTTATTT TATGTTTATT TTTAATCTTA CAAATGACAA ACCATTAAAA GTAGCATCCC 120  
 AACATCAAAC AAAAAACAA TTCATCAAAT AAAAATCGCT ACAAACCAA GTCATTAAAC 180  
 25 ACGCAATAAT TAAATTTTC CACTCATTAT AATTCTGAAT TCCAAATGTC GAATTCCGAA 240  
 AACCAAATC CAAATTCCAA AAACGCAACT CCAAATTAA AAGCATTTC CTACCATTCG 300  
 GGAAATGCTT TTTACATACT GgATTACTCT GTCATTAAATG ATTTTACAAC GGgAAACCAT 360  
 30 GTCGtCATGT ATGACCaaAG TAGCGTCGCT AtCaTaAgGt GGTTCGGATC TTTATTGGAT 420  
 AATnAT 426

(2) INFORMATION FOR SEQ ID NO: 645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:

45 nTTATTTACC CACAACATGT TGCACATTA GGTAATGGG TACCTTATTT ACTTGGTATT 60  
 GTTATGTTAG GTATGGGATT AACAAATACA CCTAATGATT TCAAATGGT CTTTAAAGCA 120  
 50 CCTAGAGCAG TAATTATTGG TGTCTGTCTA CAATTCAGTA TTATGCCAC ATTAGCATT 180  
 ATAATTGCAA AGTCTTTTCA TTTACCACCT GATATTGCTG TTGGCGTAAT ATTAGTTGGA 240  
 TGTTGTCCGG GTGGGACATC AAGTAATGTA ATGAGTTATT TAGCCAAAGC TAACGTAGCA 300

ATATATCTAT TTGCAAATGA ATGGTTGGAA GTATCTTTCG TGAGTATGTT GTGGTCAGTT 420  
 GTTCAAGTTG TATTAATTCC AATTGCTTTA GGTATTGTTT TGCAAATTAT TAATCGTAAA 480  
 5 ATTGCTGAAA AAGCTTCTAC AGCTTTGCCA ATTATATCAG TTGTTGCTAT TTCATTAATT 540  
 TTAGCAATAG TTGTAGGTGG CAGTAAGCAC CAAATCTTAA CTACAGGATT ATTAATATTT 600  
 TTAGTAGTTA TTTTACATAA CGTATTAGGG TATACGATTG GATATTGGTT AGCTCGTCTT 660  
 10 TTAATAATTAG ATCGACAAGA TCAAAAAGCA GTCAGTATTG AAGTTGGAAT GCAGAACTCT 720  
 GGTTTAGCTG TGTCATTAGC aGCATTGCAT TTTAATCCAA TTGCAGCAGT ACCAGGCGCA 780  
 GTGTTTAGTT TCATTCATAA TATAACAGGG CCTATTTTAG CAAAGTATTG GTCAAAAAAG 840  
 15 TTATAATTGC ACTAATAGAA TGAAGTGGTC ATCGGACTAT GTTAAGCTTT GATAAAGAGA 900  
 AAAAATAGAG GAGTAAATAT ATGTATAGAG CAGTTATATT TGATTTTCGAT GGAACAATAA 960  
 20 TAGATACGGA ACAACATTTA TTTAATGTTA TTAATAAACA TTTAGAGATG CATAATGCCG 1020  
 ATCCTATAAG CATTGATTTT TATCGTTCTT CTATTGGAGG AGCAGCTACA GATTTGCATG 1080  
 ACCATTTAAT TAAAGCGATT GGTTCCGAAA ATAAAGATAA ACTTTATGAA GAACATCATC 1140  
 25 TTACTAGTAC AACATTACCG ATGATTGATA CGATTAnATC ATTGATGGCA TTTTTAAAGC 1200  
 AACGTCACAT TCCTATGGCA ATTGCCACAA GTAGTGTGAA AGCGGAAATA ATGCCCACCT 1260  
 TTAAAGCATT AGGTCTAGAC GATTATATAG AGGTAGTTGT TGGTAGAGAm GATGTTGAAC 1320  
 30 AAGTTAAACC TGACCCTGAA TTATATTTAT CTGCAGTACA ACAATTAAAT TATATGCCGA 1380  
 CACAATGTTT GGCTATTGAA GATTCTGTAA ATGGTGCAAC AGCCGCGATT GCAGCTGGAT 1440  
 TAGATGTTAT TGTTAATACG AATAAAATGA CAAGCGCACA GGACTTTTCT AATGTAGATT 1500  
 35 ATGTAGCAAA AGATATTGAT TACGATCAAA TTGTAGCGCG TTTCTTTACG AAATAGGAGG 1560  
 CGTATCATGA TGGGTTACAT TATATTGTTT TTTCTAGCTG GTCCAGTAAT TTTAGGCGTT 1620  
 40 GGAAATTTGG TGATTGGTCC TATATTTAAC AAACAGACAC CATTTTCGCGT GCAAGTAAGA 1680  
 TCTTTTGTTG kTGGkTcmAT GrTTTACTTA ATACTCGCAA CAATTGGCTA TTTTTTACTA 1740  
 TTACAAGGTA AACTTTAACG AGAAAACCAC CTTACCTCAT TAAATGGACG ACCATATGTA 1800  
 45 TGTGAAATGG TAGAACGTTT ATGTTTATGT ATGAGATAGG GTGGTTTAAA TAGTTACATA 1860  
 TATTTTAATA ATAACGTCAC GATGATAAGT ACAATTAAGA TAATATCTAT GCCTACCATA 1920  
 ATGTAGCTC TTGTTGCAIT ACTTCCTTGT TCTTTTGCTG ATTTTCATAGC ACGGTAGTTT 1980  
 50 GGCACAAAGC TAATAATTAG TAAGATTAAT ACAATTACAC CAATTAATGC TGTTGTCATG 2040  
 ATGAACGACC TCCTTTATTT TTTTCAATCA ATTCCCAAAT AAACGTAGCA ATCACACCGA 2100

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CAATAATTAA TGCAATCGGT AAAGTCGTAC CGAGTTTAAT CTTGCGCTCT GGAGAATTAA 2220  
 TAATAGTAAA TACTGTAAGA CAAATGAGTA TGAAAGCAAG TGTGCAATA ATAGTTCTTC 2280  
 5 CAACTAAATA TAGGATGTCA GGTTTTTTCCA TACCGATATA ATTTATGATG AAAAATGCTA 2340  
 CAGCAAAGAG TACCGATATT TTTGTAGCAC GTAGCAGTAT TTGTTTTAAC ATTGATATAC 2400  
 TCCTTTTTTAA TATTATTAAA ATTATATCAT AATTACCAAG AATAGCTGAA GTTGTATGTG 2460  
 10 ACTCAACGGT ACTTGAGCAA CTTTTTTAAT TTTTAGAAA AATCACAAAA TAATTGTTTG 2520  
 CAAAGTTGCA AAAGCCTGCT ATAGTAGTTC TGTAACGAT TGCATGGTAT GCAAATATTA 2580  
 ATGTACCAAA ATCGATAATT TATAGTATAA TTACGGCAAT AAGTTTTTTT ATGGATTTAT 2640  
 15 TTAGTATCAA TCAGAGATGG GGTAAGAAGT TATGGAGAAC AATGAACTAC AAAGGGGATT 2700  
 GAGTGCCCGT CAAATTCAAA TGATTGCACT TGGTGGTACG ATTGGCGTGG GGCTTTTCAT 2760  
 20 GGGTGCGACA AGTACAATTA AATGGACAGG CCCATCAGTT ATCCTTGCAT ATTTAATTGC 2820  
 GGGTATCTTT TTATTTTTAA TCATGAGAGC AATGGGGGAA ATGATTTATT TAAACCCTAC 2880  
 AACAGGATCA TTTGCAACAT TTGCAAGTGA TTATATACAT CCTGCAGCAG GTTATATGAC 2940  
 25 AGCATGGAGT AATATATTCC AATGGATTGT AGTTGGTATG AGTGAGGTCA TCGCAGTAGG 3000  
 AGAATATATG AAGTTTTGGT TCCCGGAATT GCCAACTTGG ATTCCTGGTG TTATTGCTAT 3060  
 TTTATTATTA ATGGCAGCGA ATTTATTCTC GGTAAGCG TTTGGAGAAT TTGAATTTTG 3120  
 30 GTTTGCTTTA ATTAAAGTTG TAACAATTAT TTTAATGATT ATTGCTGGTT TTGGTCTTAT 3180  
 nntCTnTGGT TTTGGAAATG GTGGCCATGC GGTAGGTATT TCTAATCTAT GGACAAATGG 3240  
 C 3241

(2) INFORMATION FOR SEQ ID NO: 646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 646:

AGGCGTCAAC TCAGATGGTT TAATAATTGC CGTATTACCT GCTGCAATAG CACCGATTAA 60  
 AGGTtCGAaC ACTAGTtGAA AAGGATAGTT AAATGGTGCA ATGATCAAAA CTGTTCCATA 120  
 50 AGGTTCTTTT TTGATATAGC TTTTGTGG AAATAAATAT AAAGGTGTGT CTACATTkTT 180  
 TGTTTTAGTC CAGTTTTTAA GTTCtTACG GGCAATTTTG ATACTTyTCA AAGTTATGCC 240

	AATATCGCTC TCGTATGATT TAATAGCTTT GCTTAACTTC TTTAATTGCT CTTTTCTAAA	360
	ACTAATATCT TTAGTTTGTT GTGTATTGAA AAAAGCTTTA CTGTCATAAA ATTTTTGCTC	420
5	AATGATATTC ATAATGAAAA GAACCTCCTT ATATGATTAT TTTGGAAAA GCGATTAATT	480
	GATTTGAATG TTGTGGCCGT TAATTTTAAA TGGTCTTTCG AATTATATAT GTTGAAAGTT	540
	GAAAATAGAG CGATGAATCG TGTACATAAT AATATTTATA ACTTTAATCA TAACGAAAAA	600
10	GGTAGGAAGA AAACAAAAAT TTATACTCAA CATCGCAAAT ATTTTAAGAA AATGTAAAGA	660
	CAAAAGGGGA ATTGTATAGA AATCACTAAT CTGTGGGTTA GGGTAGCTAA AGGAATAAAA	720
	ACTACTATTG AAAAAGGGTT GTAAATTAGT CAAACGTAAA TAAAAACAG TTCATTGAAA	780
15	GTGAAATAAA TTCTACTTTA ATGAACTGTT AGTTAAATAC AACATGTCTA TAATTAGACA	840
	GTAATATAGT ATTATTTTGT TAATGCTTCA GTGATTTGAG GTACGATTTG TTTTTTTCGA	900
20	GAAACGACAC CAGATAAGAA GGCCATGTCA TCTTCTAATT GAACATTGAA TGtTCGCCAA	960
	CTTTATCTTT TTCAGCACCT ACAACTAAAA TTTTAGAATC ACTATTAATG ATGTCAGTAA	1020
	CAACAAGTAC AAATAAGTCA TATTTTCTT GTGCACTTAC AGCTAACATT TCTTTTCTA	1080
25	rATCTTCTTT ACGATTTAAC ACTTCGTCAA GGTCAACAGC ATTAAGTTGT GCAATACGAG	1140
	TCACATAGTC ACCCATAGTA AATGATTTAG CATCCATGTT TAATAAGAAT TCAACTGATT	1200
	TATCAGTTGT TGAAGCACCT GCTTTtAACA TATCTAAGCC GTACTTTTGA ATATCAACTT	1260
30	TAGCAATATC TTTnAATTCT tCAGCTGCTT TAACATCTTG TTGTGTACAT G	1311

(2) INFORMATION FOR SEQ ID NO: 647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 647:

	CATATACTTT TTCATTTCTT TACGAGATAC TTTACCAGAG GATTTAGACT TCATACGCTG	60
45	ATCCATATGT GCTTGCGTTT CAGaATGTCC ACAAACACAA CGATATACCG CTTCTTTCCC	120
	TTTACCAAAC AACGTTAATT TCTTTTTACA GTTTGGACAT CTTGCATTTG TTTTGGCGCTG	180
	TACATTCTTT TTCGTCTTAC AAGATGGATC TTGGCACACA AGCATCTGAC CATTTTTAGT	240
50	TTTAACTTTA ATCATGAATT TACCACACGT TGGGCATTCT GTGGTTGTTA AATTATCGTG	300
	TTTATATTIA CGATCACTAT TTTAATCCC ATTTACAACA TCTTTCGTAA AATCTTTCAT	360

CCATTGTGcA GTTAAAAGTG GCGACGTAA TTCTTCTGGT GCTAATTCTA ATATTTGTTT 480  
 ACCTTTTGAC GTTACTTTAA TTTTACCGTC TCTTGATTCA ATGGCATTCA TATTAAATAA 540  
 5 TTTATCGATA ATGTCGGCCC TTGTTGCAAC TGTGCCGATA CCACCTGTTT GTTTTAAAGT 600  
 TTGCGCATAT TTTTATCCT TCAATTGAAT AAAGTTCTGA GGGTTCTCCA TCGCTTTTAA 660  
 TAACGAACCT TCATTAAAAT ATTCTGGAGG TGTTGTTTCA TGTTCTCTAA TATTTGTTTT 720  
 10 TGAAATCTTC ACTTCATCGC CTTCTGAAAA AGGCTGTTGC ATCTCTGTAA TAGATTCAAC 780  
 TTGTCTAATA GATTTAAAAC CTAAAACAGT TGTTACATTC TCTTTCAAAA CAAATGTGTG 840  
 15 CCCTGCAACC TCTAAAGTTA CAGTTATCGC GTCATACTCG TGCGGAGGCA TTAAAGCTTC 900  
 TAAAAACGC TCGACAATCA TATCGTATAA CTTTAATTCT CTATTACTTA AGTCTGACAT 960  
 GACAGGTCTC ACTTCTGTAG GAATAATTGC ATGGTGATCA GATACTTTTT GATTATTAAA 1020  
 20 TATCGACATT TTTGATGAAA ATGTTTTAGA CATTAAATGGG CGTGCTTGGT CTTTATATGT 1080  
 TGTTGCCATC GTCACCTGAA TACGTTCTTT CATAGTATCT ACCATATCAG TTGTTAAATA 1140  
 GTTTGAATCT GTTCTGGAT AGGTTACGAC TTTATGTCTC TCATATAAGC TTTGAAGTGT 1200  
 25 ATTCAATGTT TCTTTAGGTC CAATTTTATA ACGTCTATAC ATATCTTGTT GTAAATCTGT 1260  
 TAAATTGTAC AGTGATTGCG GATACGACTT CTTATGTTTA GTAGCAACAG ATTTAATCTT 1320  
 30 ACCATCGACA TTTTCAAAT TATTAACCAT CTGTTCTAAA GTTTCTTTaw TGGtATATCG 1380  
 CTGATTTGaw TCTAGCTGAA AATCAAACCC TTTTACCGTT AATGATAATG TAAAGTATTG 1440  
 TTGTGGnTTG AACTGATTAA TCTCTTGTTG GTCGTGTAAT TTAATAAATT GAAACGGn 1498

35 (2) INFORMATION FOR SEQ ID NO: 648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1044 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 648:

TAAAACAATT CGTTTTATTA ATACAGTTTG TAAAAGTATT CTCTTAGTAC TAATAGCTAA 60  
 TGTAATGATA GAAATACTA GTGTTATTAA AGATTTGAAT AAAATAAAAG AAAGTGAAG 120  
 50 ATATTGGAAT GTATTAGATG ATTATTACAC GATTGAATTT GCACCTTATC ACGAAACAAA 180  
 ACAAAGTTTG ATTGATAATA TGGTGCGATC AGAACAATTA GTAAAGGCTA GTGAAGCAGA 240  
 AAATAATGCG ATTTTATTCA AACCAAAGGG TGACTCCGTT GACAATGACA ACTTTTCGCC 300  
 55

TCAACCTGAT ATTCCGATAA AAAATCAAAA AAATAATGTC GAAGTAATTA TTCCACAAAA 420  
 GTTTCATGCA ATGCGTAATG AAATCAATCA AGCATATCAT TCATGGTTTG AATTTGTACA 480  
 5 AAATAAAAAAT AATAAGAGA ATAAGTTATC TATACAGTTT ATCAACAAAA ATGATTGTCG 540  
 AATTTTTTCA TTTGATGCAC GAGATAGTCG CCATTGTGCA TTTATAGAGG CGCCAATCAT 600  
 TGTGAATGTT CAGGCATCAG ATTTATCGaA TGATTTtAT TATGCCATGa TCaGTCaAGG 660  
 10 CGGGTATTTa TTCaAAAATT ATGaCGCGCT AGTAAAAAAT ATTGGAAAAG TATCCATCTT 720  
 GATGGGGAAA TCCAGTGGAA TAACCAATTA TAAAGATAGC GTGATGGAAA TGTATCATGA 780  
 AAACAATTTG AAATTAACAG TACTCAACTT TTCACAAATC ATTATCGCAA TCATTTTAAT 840  
 15 AATTATTATT TTATTTGATG TGAAATATTA TTTTGAACAG CATCGAAAAT TACTCGTAAT 900  
 CAAAAAGCTA TATGGTTATT CAACATTAAG AGCCAATTAC CAATACTTAT TAATAAATAA 960  
 20 TATAGTTGTT ATTTTTATTG GAATATTGAC GAATGTAATT TTACATTCTC ACTATATAAT 1020  
 GATGTTATTT GCAACGATTC TTGT 1044

## (2) INFORMATION FOR SEQ ID NO: 649:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 649:

35 GAACATATTG GGTTATGCAA GGnGGTCACT CTTCACACTT ATAAACAACA TTTTAATAAT 60  
 GTAAAGTTTA ACCAGCTAAC ACTTTTGTTA GCTGGTTTTT ATTTTCCTTC AATTTTTAAA 120  
 TGGTTAAGTC CCCTTCTATA TCTTATAAGA CAATCATTAT AATCAATTCA ATTAATACAT 180  
 40 TAACAACCAC AACTAATAAA TATAGTAACT TCAAAATCCA TATTTATGTC TAAAGATAAT 240  
 CTCAATGTTG TTCACGTCAA TAAATTATC CCTAGGTTTT TAAAAATTGT ACATGTTTAA 300  
 ACAATCAAAA GTGTACATTA TTAAATTATC ATTTCCAGTT AGATTTAGAA AACATTCACA 360  
 45 CCACGCATGG ACCAACGTAT TCGTCTTcAT TcATTTTAG 399

## (2) INFORMATION FOR SEQ ID NO: 650:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 650:

GTACTAGGTT CTAnGATTCC CTACTGTAGT CATAGATATT TTCCAAACAG AGCCTGACAA 60  
 5 CTTTTTCATTT TTAATAGTGA TCACTATATT AATCGCTATT GCAATTTATG CATGTCGATT 120  
 TGTTTGGGTT TATTTCTGGT ACAAAGATTT TTATTTCCCG AAAAATATAC AATCTTATCT 180  
 AGACGAGGAA CATGATTCAC ATGAAACACC ACCTTCTCGA GTGCGTTACG CATTATTAT 240  
 10 GACCATGTGT GGTATTCACG GTACAATTC ACTTTCAATG GCACTTACAT TACCATTAT 300  
 CATTACAAAA GGACAAGCAT TCGAATACCG TAATGATTTA TTGTTTATTG CATCTTTCAT 360  
 GGTATTAATT AGTTTAATCT TAGCGCAAAT TGTTTTACCT TTAATTACAC CATCTGCCGA 420  
 15 AGATACTACT TTAAAGGTA TGACTIONTCA ATCTGCCAAA ATTTTCATTG TTCAAAAAGT 480  
 GATCCAGCAT TTTAAAAACG AAAGTAAAAA AGACAAAAAC GATACAAATT ATCGCCCAGT 540  
 20 ATTAAACCAA TACTATGGAG AATTGTTATT TTTATTAAAT TCAGAACCTG ATAATCAAAA 600  
 TACrAAAGAA CTCAAACGTT TAGAAGATAT TGCaAAAGTA ATCGAAACAT CTACACTTGA 660  
 GCGTTTAATT GATAAAGGTA AGGCAACATA TCAGGATATT AATAATTACC GCAATATTGT 720  
 25 CGAATTAACA GAGACACACC GTACTGC 747

## (2) INFORMATION FOR SEQ ID NO: 651:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 1373 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 651:

ATACAATACT CTTTTATTAT TCAATAAGCC ACTTCCTATA GCAAATGTTT AACTTTAAAT 60  
 40 ATTTTTCGAT GCTAACAAAA AATCACACTA TCATCTTTTA AAATGAAAGT GTGATTACAA 120  
 GCAAATCTGT AAAATTTATA AAGCAGAAAC AATTCAACTT TATCATTATG ACATTTCAAT 180  
 TAAACCTTCT ACATTATAGT TCCAAGCATC TTACACATGA ATGCAAGTAT TTAACGATTT 240  
 45 AATTGTGACA TAGCCTGTTG ATATTGTGTT TCATTGATAT AATTTTGTTG CTTCAATTTT 300  
 TCTAAGTTCG TGCTTACACG TTGCGTAAAA TTCTCTGACA TATTATTGAT ATTATATACG 360  
 CTAGGTGCAT TGACTTTACT AGCTAAAATA GCGCTTTGTA AACTGTTAT GTGAGACATT 420  
 50 GTTGTACTAT TTTTATTCAC GGTTGTTCCA AAGTAATGGT TTGCTGCGCC CTCAAGCGTA 480  
 TATTGATTAT CCCCAAAGTA AATATTATTT AAATAAAAGC TTAAAATTC GTTCTTATTA 540



TCATTATCAT AAAAATAATT TTTGACAAC TGTGTGTAA TGGTACTACC ACCTTGCACA 660  
 TCTCTGTCGC TAATCGTTGA AAATAAGCT CTAGTTGTAC CTTTCAAATC GAATCCATGA 720  
 5 TGATTGTAGA ATCGTTCATC TTCCATTGAA ATAAAGGCAC CTTTAACATA CTCTGGCATG 780  
 TTATCAGCTG ACACAAAAC ACTTTTATTT TCAATTTTTC TTAGTTCATC CACATTATCG 840  
 CGTGTAGATA AAAAATACAT GATACCAATA AACAATGCGA TAATGATTAG AATGGTTAAT 900  
 10 AATATTTTTTA ATAGTATTCG TTTACTTTTT TTCTTTTTTCG GCGGTTTGCC AACTGGTTGA 960  
 TAATACGTAT TATAGTGAGG TTCGTGTTTC ATATGCTCAA AATGTTTCATT TGAGTTTGAG 1020  
 15 TACCTATCGC TTCTTTTCAT GCGTTTGCTC CTTCTTTTAA AACTCACTTA GtATATACCT 1080  
 TGaGTTTACC AGTACTATCA CAAATAGGCT ACACTTTTTG GGAAAATCAG TCCAAGGGCT 1140  
 TACAATCGTA TACGCCATCA TACTTACTTT TTTGTTTTTT GAAAAAATTA TAGATAAATC 1200  
 20 ATTGCAATTT TAAATATTAA TCATGTCAAA TATTGTTATA TTTTATAAAA ATAAAAGACC 1260  
 ATCCCTATTA AATGCCAATA GAGACGACCT TTTATTTGTT ATTCATTTAT TAAAACTAAA 1320  
 ATCCATATTT CATTTCAAAC GAAAATATAT AAATTTTAAC AATCGrTAAC CAC 1373

(2) INFORMATION FOR SEQ ID NO: 652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 859 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 652:

GGCAGATAAT TTAGTCATTG TTGAATCGCC TGCAAAAGCA AnAACCATTG AAAAGTATTT 60  
 AGGTAAGAAA TATAAAGTTA TAGCTTCAAT GGGACACGTC AGAGACTTAC CAAGAAGTCA 120  
 40 AATGGGTGTC GAACTGAAG ATAATTACGA ACCAAAATAT ATAACAATAC GCGGAAAAGG 180  
 TCCTGTTGTA AAAGAATTGA AAAACATGC AAAAAAAGCG AAAAACGTCT TTCTCGCAAG 240  
 TGACCCCGAC CGTGAAGGTG AAGCAATTGC TTGGCATTTA TCAAAAATTT TAGAGCTTGA 300  
 45 AGATTCTAAA GAAAATCGCG TTGTTTTCAA CGAAATAACT AAAGACGCTG TTAAAGAAAG 360  
 TTTTAAAAAT CCTAGAGAAA TTGAAATGAA CTTAGTCGAT GCACAACAAG CGCGTCGAAT 420  
 50 ATTAGATAGA TTAGTTGGCT ATAACATCTC GCCAGTCTT TGGAAAAAAG TAAAAAAGG 480  
 GTTGTCAGCG GGTGAGTTC AATCTGTTaG CmTTCGTTTA GTCATTGACC GTGAAAATGA 540  
 nATTCGAAAC TTAAACCAG AnGAATATTG GACTATTGAA GGAGAATTTA GATACAAAAA 600

aAAAGATGTT GAGAAAATTA CAGCTGCATT AGATGGAGAT CAATTCGAAA TTACAAACGT 720  
 GACTAAAAAA GAAAAAACGC GTAATCCAGC AAACCCATTT ACAACTTCTA CATTACAACA 780  
 5 AGAGGCGGcA CGTAAATTAA AcTTTmAAGC AAGAAAAACA ATGATGGTCTG CACAACAATT 840  
 ATATGAAGGT ATAGATTTG 859

## (2) INFORMATION FOR SEQ ID NO: 653:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 653:

20 TTCAACTTCG TTTGGAAATC ATGTTCTCA ATTGTTGGAC TTAAACGAAT TTCTTTAACA 60  
 TTGATAATTT TTTGTTTCTT TTTCATTTCT TTTTCTTTT TCTGTTGTTT GAATTTGAAT 120  
 TTACCGTAAT CCATAATTCT TGCAACTGGT GGTTTCGCAT TCGGTGCAAC GACCACTAAG 180  
 25 TCTAAATCTA CACGTTTCAGC CATTCTAAA GCTTCACGCT TTGATTTAAC ACCAATTTGT 240  
 TCACCATCTT GACCGATTAA ACGTAATTCT TTTGCACGAA TTTTGTCTT GATTTGAGTT 300  
 TGATCTTTTG CTATGGTTGA CACCTCCAAA ATTTTACGA AATTTGCACC AAGCAAAAAG 360  
 30 GAAGAGCAGG TATAAAATAC CCGCTCTTCC TTATACACAG TTATGTGTAA TGTGATTAAC 420  
 CTGCCAACTG CTTTATGCGT CGCTACAGGT GAGAAGCGGG TGCTTCTACT TGGTTCGTTT 480  
 35 CGTATTCAAC GTTATTAATC ATATCAACAA TTCACATTTA AGTCAACACT ATAAGTGTAA 540  
 TTATTTTTTAT TTTAACCTTT TATTTTCATCC ATTGACACGT CTGACGTAA ATCTACTTGT 600  
 TCTAATGGAA TTTTTTTCGT TTTATATCGA AGCTTATGAT AAATAAAGAA TGCTAAAAAT 660  
 40 ACTGGAATTC CCATATACGT AATTAAGAAG CGACTAAAAT TAAATCTCC TGTnTTAATA 720  
 AAGTCAACAT CTTGCCCAAn AAnTACT 747

## (2) INFORMATION FOR SEQ ID NO: 654:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 501 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 654:

TTGTGCTTCT TTTTGTAGCTT CTTGAACCTC TTGTGCCTCT TGTGATGTAT CACTyAAATT 120  
 ATTTGCACTT GCTTCTTCTT TTATCGCTGC TTGTTGTGCT TTCAATGCCA CTGCTTTTGT 180  
 5 TTCTTyATTT GATACAGCCA CACTTTTATC CGCTTCTGCT TGTGCTTCTC TTTTAGCTTC 240  
 TTGAATCTCT TGTGCTTCTT GTGATGTATC ACTTAAATTA TTTGCACTTG CTTCTTCTTT 300  
 TATCGCTGCT TGTGTGCTT TTAATGCCGC TTGCTCATTT TTAGATTGT TAAAAATCC 360  
 10 TTCAACACGT TCTTTTGTAT AGGCAACCGT TTCTTCAAGT TCGGTTTTTC TTTCTTCAAA 420  
 CTTTTGCGAC AGTTCTTGTn CTTTGACTTT nAAATCATCT GCTTTTTTGAT AAACTTTATT 480  
 15 TTAAAAATACC AACCTAAAGC C 501

## (2) INFORMATION FOR SEQ ID NO: 655:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 655:

CACCTTGTC TAATTAATTT TTTGATTTTT CATTTTACTG ATAATAGGTT CAGCATTAAAT 60  
 CATGATTTAA CCTCCACAT TTAATCATTA ACTTCTATTA TATATGATTC ATATTAAATG 120  
 30 TCAGTCAAAA AAGTTAGAAA TTCATTTTAA TGCATTTATA TTTGAAAAT CCCTTATGTA 180  
 TCTAAAAGCA TTTTTTAAAC TTGAATTTTA AAACACTAAA CAACACATAC GTCTCTGTGT 240  
 35 CATTTTCATT TTTTGTATGT CATATATATG TTTACTTCAT TTAAATCAAT TTCATCTTAT 300  
 AATTTATCGT GTATTTTACA AAAGATTGAC TTCAATTCAT CGTAAAAGTT ATACTTTTGC 360  
 CATTTTPTAA TGTAACATGG TGTTAGTAAT AAAATAATA CATTGAGGTG TTTTACATGA 420  
 40 CAGCATTATT CCCTTATATC GCTTTTGAAA ATTCAAAAGA AGCCCTTGCA TATTACGAAG 480  
 AAGTATTTGG TGCAACTGAC GTTAAACGTT TAGAAGTTGG CGAAGAACAA GCGTCACATT 540  
 TTGGTATGAC TAAGGAAGAA GCGCAAGAAG CAACTATGCA TGCTGAATTT GAAGTGCTTG 600  
 45 GCGTAAAAGT GTTATGTTCT GATTCTTTTG GTCGCGCTGA CAAAATTaAT AATGGCATAT 660  
 CATTATTAAT TGATTATGAT GTTAACAATA AGGAAGATGC TGATAAAGTT GAAGCATTCT 720  
 50 ATGAGCAAAT TAAAGATCAT TCTTCAATTG AAATAGAATT ACCGTTTGCT GACCAATTCT 780  
 GGGGTGGCAA AATGGGCGTC TTTACCGATA AATACGGTGT TCGTTGGATG 830

## (2) INFORMATION FOR SEQ ID NO: 656:

(A) LENGTH: 539 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656:

10 GTATCCATGG GCCCGTThCG CACAACATTT GGnACAATTA GGTACACGnG TTGTCaTCGG 60  
 TCGTTTTCGGT ATAATTTTAT CGAATGaAGG CGGTGCGTTA CAAACAATGA AACTACCATA 120  
 CGAATATTAC ATTGGTGGTA AATTAGGTTC TGGTCAACAA TGGTATTCAT GGATTCATAT 180  
 15 CAATGATTTA ATTCAAGCTA TTTTATTTTT AATAAATAAC GAGTCAGCTA GTGGTCCGTT 240  
 TAATTTAACT GCACCTATAC CTGAACGTCA AAATTTATTT GGCTACACTT TAGCAAGAGC 300  
 TATGCATAAG CCTCATGAAA CTTGGGCACC AAGTCTTGCA ATGCGTCTCA TACTTGGTCA 360  
 20 AATGTCAACA GTAGTATTGG ATACTCAAAA AGTATTACCT aATAAAATTC AAGCATTGGG 420  
 aTTCCAATTT AAATATAGTA ATTTAAAAAT GGnACTTGAA GATTTAATTA AAGAATAATC 480  
 AATACCATTA ATGAGCATTa GAAACAACAT ATGTACTAAA TGTAATGTCT AGAGCGACT 539

25

## (2) INFORMATION FOR SEQ ID NO: 657:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 657:

ATCAAGTTGA ATATCATCCA TATTTAACCC AACATAAATT GAATTATAT TTGGCAGCAC 60  
 AACGTATCGT gATGGaATCT TGGTCACCAT TGATGAATGC ACAAATTTTA AATGATGAGA 120  
 40 CAATTAAAGA CATTGCTCAA GAATTAGGAA AGTCACCTGC CCAAGTTGTT TTAAGATGGA 180  
 ATGTGCAGCA TGCTGTGGTT ACAATCCCTA AATCGGTGAC ACCAAACAGA ATCTCTGAAA 240  
 ATTTCCAAAT ATTTGATTTT GAATTATCAG ATGAACAAAT GACGCGAATT GATGGTTTAA 300  
 45 ATCAAGATAA GAGAATTGGA CCTGATCCAA AAAAATTTGA AGGCTAGATT AAAATCGCTC 360  
 AACTGATGAA AAGGTTAGAT GAATTGTCAG GGCTTGGGAC ATTAAGTTCT TAGGCAATGT 420  
 50 AAAAAAGCTG ATTTCTATTA ATTATTTGAT AGAAATCAGC TTTTGTGATA TGTATTTTAT 480  
 AATGTACAGC TCGTTGAGCT GCTATTTTCC TTATATTAAG TGCCATTAAT ACAAACCTA 540  
 GCTCTCGTTT AACTTTATTT AtTCCTCGAA CTGACGTTTC AGTTAAACCC AAAATAGCCT 600

55

CTGGTTCAGA AAGCTTTTGA TTAATTTGGA CTTTAAAGTA TTCCCAATTA TAATTCTTCA 720  
 TGATTtTCTT ATTGGATTTT GAATTTGGTT TCATGCATTG TTGCCTCAAA GAACATGCTG 780  
 5 AACAGTCATC GCATTCATAT AGTTTGAAGT CTCGTTTAAA ACCATATCTA TCATTACGGT 840  
 ATGCATATCT TTTAAAACCT ATTCTTTTGT TATTAGGACA TATAAATTCA TCATTAAGTT 900  
 10 CGTCATATTT CCAATTTTGA GTGTCGAAAA TGTCACTTTT AAACTTTCTA GTTTTATCtT 960  
 TAATAACAT GCCATACGTA ATAAGTGGCG TTTTATTAAA ATCATCTATA ATGGCCATAT 1020  
 AGTTTTGGCT CACTACCCAT AACCTGGCAT CAGCTACCAA ATGAACCGAA GGGATTTTTG 1080  
 15 GAATCCATTG GTTGAAAAAA TGGGAA 1106

## (2) INFORMATION FOR SEQ ID NO: 658:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:

TTTTAACTTT ACTCTTTGAT TTAAAGAGTG ATAAATGTTT ACAGTTTAAT TAAAACTGCA 60  
 TAAGAACTTC TAGCTTTTCT CTTTCGTTCA AAGAGAAGCA GCTGTTTCGCA GTTTAATCAA 120  
 30 AACCACATAA AGCTTTTAAC TTTACTCTTT GATTTAAAGA GTGATAAATG TTTACAGTTT 180  
 AATTAAAACT GCATAAGAAC TTCTAGCTTT TCTCTTTCGT TCAAAGAGAA GCAGCTGTTC 240  
 35 GCAGTTTAAT CAAAACCACA TAAAGCTTTT AACTTTACTC TTTGATTAA AGAGTGACAA 300  
 ATGTTTACAG TTTAATTAAA ACTGCATAAG AACTTCTAGC TTTTCTCTTT CGTTCAAAGA 360  
 GAAGTTCTAA TACCACCATA TCGTGCGATC GGGAACGGTA 400

## (2) INFORMATION FOR SEQ ID NO: 659:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1899 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 659:

ATAATTACAA TGGCTACTGC AATTATTGTT GGAATTATAT ATTTCAAGTTT AGTCATCATT 60  
 TATGCTCCCT TGATTTCAAA TTCATATCAT TAGTTTACCA TATTGAAGAT GATATAATAA 120

	AAC	TTT	AACT	GAG	CTT	CATG	GGG	CACC	CAGG	TTT	TGA	AGAA	GAAG	TAAAA	ATT	TAT	ATG	AC	240
	TCAG	CAA	ATG	GCG	CCG	TACG	TAG	ATG	AATT	TAT	TG	AAAT	CGT	ATG	GGG	TG	GAT	TTTTTT	300
5	TGT	GAAAA	TCT	AAAA	ATC	CAA	ATG	CAAA	ACG	TG	TAATG	ATT	GC	AGCAC	AT	ATG	Ga	TGA	360
	AAT	CGG	ATTT	ATG	ATT	ACAA	AT	ATC	ACT	AA	AAAT	GGA	AT	TCA	ATT	CA	CAA	ATTT	420
	TGG	TG	TTG	CA	AAT	GAT	ATTT	GG	CA	AGG	ACA	ACG	CT	TAG	TA	AT	AAAA	AATA	480
10	TAAA	ATT	TATC	GGT	GTT	GTTT	CTA	AT	TAT	ACC	TAA	CA	TTTT	CGT	ACT	GG	TA	GTGA	540
	ACCG	GAA	ATT	AA	GAT	TTT	AA	CAT	TAG	AT	AT	AGG	TG	CT	CAA	AAT	G	AAG	600
15	gCG	CGG	AATA	GAT	AT	AGG	AG	AT	ACA	ATT	GT	AC	CT	CAC	ACG	CC	ATT	CAC	660
	ACAT	CG	ATAT	AGT	GCT	AA	AG	CAT	GGG	ATA	TCG	TT	AT	GGT	TGT	GT	CT	TGG	720
	ACT	AGA	ATTA	TTA	AA	AG	ATA	TAG	AATT	AGA	TGT	AG	ACT	TTG	TAT	GT	TGG	CG	780
20	AGA	AG	AGG	TT	GG	ATT	ACG	AG	GTG	CG	AA	AGC	AT	CT	GC	AG	AG	ATG	840
	ATT	TG	TAG	TT	GAT	TG	TT	CAC	CTG	CCA	ATGA	CGT	TAA	AGGA	AAC	CA	ACCAT	TAT	900
	ACT	TG	GTA	AAA	GGG	ACG	TTAA	TT	CG	CATA	AAA	AG	AC	GGT	TACA	AT	GAT	TTTT	960
25	TAG	AG	ACT	TAT	TT	ATT	AA	AGT	TAG	TAG	AAG	C	AT	G	AC	ATT	GA	ACAT	1020
	ACC	AGG	TGGA	AC	AG	ATG	GGT	G	GAG	AA	TTCA	TAA	AG	CT	AA	T	ATT	GGT	1080
	TAT	TG	G	TGTA	TGT	GC	ACG	AT	AT	TC	ATAG	TAC	AG	ACT	CA	GT	AT	TTG	1140
30	TTTT	GC	AGCT	AG	AT	CTTT	TAC	TTT	CAG	AAG	C	CATT	TG	TAAT	TTAG	ATA	ATA	ATCA	1200
	AAC	ATT	ACAA	TATA	AA	TAAT	CGG	GTA	ATAA	CA	ACT	ATT	TAT	CT	CTAA	ATAG	TTAT	ATATA	1260
35	TCAT	TAA	TTA	AGG	AG	ACATA	AAA	ATG	AAAC	AACT	TGA	ATC	AGA	ACA	ACAA	TTT	GAA	TCTT	1320
	TAAA	ACA	AAGG	TG	CT	ACAG	TA	TTT	GAA	TTCA	CTG	CAGG	CTG	GTG	TCC	AGAT	TGT	AGAG	1380
	TAGA	ACC	CAGA	TTT	ACC	GGAA	TTAG	AAG	CGA	GAT	ATC	CTAT	GTTT	G	ACTTC	GTAT	CAG	TAG	1440
40	ACCG	TG	ATAA	ATTT	T	GGAT	ATTT	G	TATTG	AAA	ATG	GTAT	TAT	GGG	TATT	CCA	AGT	TTTT	1500
	TAG	TAT	ATAA	AA	ATG	GAG	AA	CTG	CTG	GAA	GTT	AT	ATTG	G	AAA	GA	ACGA	AAAT	1560
	AAC	AG	ATAG	TGC	AT	TTTT	TAA	GCT	CA	ATACG	TG	TA	ATTT	AG	ACT	AG	AGAA	AAC	1620
45	TACT	CG	TTTT	TCT	CTG	TTAC	TAT	GTG	TTGA	TTT	ATT	GTAA	ACT	ATT	TATAA	GGT	GC	GAAAT	1680
	TAG	GAG	TGTT	AC	AT	TGAAT	AC	CTTT	TCAAA	TG	AG	AGATAA	AT	TAA	AGG	AA	CGT	TTA	1740
	ATTT	AG	ACGT	TG	AT	TTTT	AAA	TTT	AAT	CGTG	AAG	AAG	AAAC	TTT	GCG	TATT	TAT	CGA	1800
50	ATA	ATA	ACAA	AGG	TAT	CACG	ATT	AA	ACTTA	ACG	CTAT	AGT	CG	CAAA	ATAT	GA	AG	ATA	1860
	AAG	AAAA	AAAT	TGT	AG	ATG	AA	ATT	GTTT	TATT	ACG	TTG	ATG						1899
55																			

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3774 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 660:

10	GTATAATATC CTTTCAATCT GTTTTCATAT TTTATATATT TTTTAAATAT AAGTGCTAAA	60
	TGTTTTAACT AAAGCATAGA TTGACAAGAT GTTATACAGA ATTTCAAATT CTATCCAATA	120
15	TTGTTTGAAG TGTAAGTATCA CTGGATTGGT ATTAAACAAT GTAAAGGAGA GATTGCAAAT	180
	GCCGTATAAT TACAAGAAAC AAAATGGAGA GTTAATGTCT GTAATGAGCC AAGGTGAAAA	240
	GTTTATTCAT CAATCACCCG TTAATGATGA ACTTAGTGCA TTGATTAAGT TATTAATTTT	300
20	TAAAATTAAC GGTTGTGATT ATTGTGTTGA TATCCATAAA AAAGAATTAA AGGAATTGGG	360
	TGTAACACAA ATGAAAATTG ATGAAGTCTT GAGTTTTAGA CATTAGATT TATTTACTGA	420
	TCAAGAAAAA GTGACGCTTG AATTTGCAGA AATGTTAAAT TCAATCAAAG ACTTTAAGAA	480
25	GTTTGAAATT ATTGACCGGC TAAAATCATT TTATGATGAA GAACAAATTA TTGATCTTGT	540
	CTTTGTTGTA AACCAAATTA ACGGTTGGAA CAGATTAAAT ATTATTAGTG ATAGACTATA	600
	ATTGTTTATA TAAATGCAGA GTTTCATCTC GAACGCTATA TCATAACAAA TCATGCCACT	660
30	ATACAGGTCA AATCTTGTAT AGTGGCATT TAAATTTATCC CTTTGAATAC TGTATTTTAA	720
	CGAATATCGG TCCACCTGGT CCAACAGGGA TACCTAATAG GAACCAAATG ATGACAAATA	780
35	CTGTCCATAC AATACTTAGC GCGATTGAAT ACGGCATTAA ACTAGAAAGT AAGGCTCCGA	840
	GTTTCATGCG TTTATCGTAT TTTTGTGCAT AAGTTAATAA TAAAGGTAAG TACGGCATCA	900
	TCGGTGTAAT TGGATTGGTA ATTGAATCGC CTACACGGTA AATGACTTGT GTGAATGCGG	960
40	GATGAAAGCC GATAAGGATT AACATTGGTA CGAATATCGG TCCTAAAATA CCCCATTTAG	1020
	CCGATGCGCT TCCGATTAAAC ATGTTGACCA TTGCACTCAG TACAATAATA CCTAGTATCA	1080
	ATACAATACC GTTTTGATGT TCTAATAATT TGGCACCTTT AACAGCAGCG ATAATTCCTA	1140
45	AATTACTCCA CTTTAAATAC GCAAGTAGCT GTGCTGCAAA AAACACAATA ACGATAAATG	1200
	TTCCCATTTGA TCCTACAGCA TCGCCGAACA TTTTACCTAA GTCTTTTGTA TTTTTAATTT	1260
50	CTTTGCTTAA AATCCCATAA ACTAATCCAG GTACTAAAAA TACGACAAGA ATAATTAATC	1320
	CGACACCGTT AATTAATGGC GCATCGTCTA GTAAGCTGCC TGTTTTAGCA TTTCTTAAAA	1380
55	AGCTATGTTT AGGAATGGCT GTAATAATTA ATAAAATAAT TGTGACTATG AAAGTATAT	1440

## EP 0 786 519 A2

	CATCATGCAT TAAACTGTCA TCATATTTTC CTAATCTAGG AATAATGAGC TTAGTTGTAA	1560
	CTAGCAATAT CGTAGGAAGT AATACAACGA CACTCGCTGC GATAAAGTAC CAGTTCATAG	1620
5	CAACGTTTGT TTTAATAGAA TCTGAAACGA TACGTGTTGC CGGTTCTGTA AATGAATAGA	1680
	CCAAAGCATC TTGCATACCA ACAACTATAT TTGCTGCAAA TCCTCCAACA GCGGAAGCAT	1740
	ATGCCATCGT TAGTCCAGCG ATAGGGTGAT AGCCAATTTT AATAAAAAGC ATTGCTGCAA	1800
10	GCGGCGGCAA GATAATTGTC GCAGCATCGC CGGCTGTACT ACCTAAAATA CCAATTAATA	1860
	TAATAGTCGG TAAAATTAAG AAACGTGGTG CGCGATTAC AACAGAAATC ATTAAC TTAT	1920
	CGAAGTATCC TGTTTTCTCT GCAACACCAA TACCAATCAT CACTGCTAGT ACTAAGCCTA	1980
15	ATGCTGGGAA CTCTGAGAAA TTTTAAATCG TATCATTCAT TATCATCGTA AATCCATCAT	2040
	GGCTAATTAT ATTTTTAATA TAAATGGTTT GATGCGTACC TGGATGCTTA ACAGATACAT	2100
20	TAAATAATGA GATAACCCAT GTCATAATGG CTAAGCCCAC ACACATTAAA AAGAATAAGA	2160
	CGCTAGGATC TGGCAATTTA TTTCCGATTT TTTCAACACT ATTCAAGAAA CGATTGACGA	2220
	TAGACCCCTT TTGTTGATGT TTTGATGTCA TCAATTATTC CCCCCTTTGT TAAATATTTA	2280
25	AAGTGTAACA AAAAATACTC TCAAAAGTAA CAATTTTCAG GAAATAAAAA AACTAATATT	2340
	GTTAAATATT TTGAGTTATT CAATAGAAAG TGTATAGCAG AGTAGTTAAG ACTGCCTGAA	2400
	GACTTATCTA TTAGGTTTAT GAAGCATCGA ACAGTGGAATAAAGGACTG TAAGTTTAAG	2460
30	ATATGTTGTA TAGGAGTGAC TGAATGAAAC GTTTGGAAAA TAAAGTAGCA GTCGTAACAG	2520
	GAGCAAGTAC AGGTATCGGT CAAGCTTCTG CAATCGCTTT AGCTCAATAA GGTGCGTATG	2580
35	TATTGGCGGT AGACATAGCT GAAGCGGTAT CGGAGACTGT CGATAAAATT AAAAGTAATG	2640
	GTGACAATGC GAAGGCGTAT AATGTGGATA ATGCAAGCGA ACAACAAGTG GTAGACTTTG	2700
	TGTCTGACAT AAAGGAACAG TTTGGAAGAA TCGATGTGTT GTTTAATAAT GCCGGTGTGG	2760
40	ATAATGCGGC TGATAGAATT CATGAGTATC CAATAGATGT GTATGACAAG ATTATGAATG	2820
	TAGATATGCG TGGGACATTT TTAATGACGA AAATGATGTT ACCTTTAATG ATGAATCAAG	2880
	GTGGCTCTAT TGTTAATACG TCTTCATTTT CCGGACAAGC AGCAGACTTG TATCGCTCTG	2940
45	GATATAATGC TGCGAAAGGT GCAGTGATTA ATTTTACAAA ATCAATCGCA ATTGAGTATG	3000
	GCCGTGATAG CATTCGAGCC AATGCGATTG CACCAGGTAC AATTGAAACC CCGTTAGTAG	3060
	ATAAACTGAC AGGTACGAGT GAGGATGATG CAGGTAAAAC ATTTAGAGAA AATCAAAAAT	3120
50	GGATGACTCC GCTGGGACGT TTAGGTAAAC CAGAAGAAGT TGCTAAATTA GTAGTCTTCT	3180
	TAGCATCTGA CGACAGTTCA TTCATAACTG GAGAGACGAT TCGAATTGAT GGTGGTGTGA	3240

55



AATTATTTAA AATCGATATC CAGTGGAAAA GAATTTGGCA TGAAGTAGGC AATGTATGCA 3360  
 TATTGTCGCA ATGAAAGACA TTTAAAGCGG AGATTAATTA ATCTTTGAAA ATCACATATT 3420  
 5 GTTCATTTGA AGTGTATTGC TTAAAGCTTG TTTTAACGTA TTGTAGGTCG TGCATCTAAT 3480  
 TTATCAGAAT CTCGAGTTCA AACTTTTGGG GTATCTTTAA AATAAGCTGT ATTTTGTCTA 3540  
 TTCTAATAAA TTAAGGAGAA TTTTATGTTA AAAGAAAAAG AAAGTTTGTAG ATTGCTATAT 3600  
 10 CAAGCTATAA GAGAGATTGC AGATAAAATT GGAGATAATC AGTTAGAAAC TAATTCCGTT 3660  
 AGTTTATcAT cATTGGACTT TGATTTTGAA CATGAAGTAT TTGATGAATT GTATCTTGTG 3720  
 15 ATTTcAAAAT ATTTAAATAC AGTAAGTATA GAGAACATAA GTCATAGTGA GCTT 3774

## (2) INFORMATION FOR SEQ ID NO: 661:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 1078 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 661:

TACTGGTTTT GGATTTTGGG GGTAATACAG TACCTAATAG TAATnATGGT GTCGTCAnAA 60  
 TTATATCTTT CCGTGATGTT CTTACTCATT AGAACATCnG CCTTCAGAGG AATCATGATA 120  
 30 CGAGGAATAA GAAATTTAAA TGTGAGCGAA GTCAATATAG TATTTGCGAT TATTTTATT 180  
 AACTCCATTA TTATTGTTAG TTTGATTTTT CGAGGATAAC TTCAATTTTT GCATTTTGAG 240  
 35 GTTTTTTAAC ATATCTATTT GCATCAGTTG ATGGCAACCT TTTACTTAAA TCTATTGTGT 300  
 AGTTATTGTC TGCACCTGTT ATTTTAATTT GTCCTTTATT ATAAGAATTA TTATATAATT 360  
 TTTTACTTTT AATTAATGTT TGACGAATAC GAAAATCTAA TTCTTTTAAA GTTAAACAG 420  
 40 GCTTATTGCC TTCATAAACT GGAAATCCGC CAGTAAACGT TTCTGCTTTA TCTTTATATG 480  
 TTACATTCAG TTTATAGTGT TTATCGTTAG ATGTTGCTGC AGGAGTAACA CCACCAGTAA 540  
 ACGTTTCTTG AGATAATGCA AAAGaATCAA TGGTTTCTTG GTCTTTTATG CyAAAAATAT 600  
 45 CAACGCTTTT ATTTCTTAAT TGGTTGATAT TGCCCCAACT TTCAGGTCCA TAACTTGAA 660  
 TATGACTATA CCAAGaAAAC TGTAACAACG TTGCATGAAT CgTACCGTTA TCTTTTGGC 720  
 ATAACGTAAT GTTAGAGAAG GTTAAATATT TTTGCGAGTA ATATTTAGTT AACTCATTA 780  
 50 CGTTAGTTTC GTTTTGATTT ATATAAcAAG cTTTCGCTTC AGATGAAGAA TTGATAkGTG 840  
 TATTAGGAAA TTGTGTAGAT GCTGTACCTA ATAGTAACAA TGTTGTTGAT AAAATAATTT 900

ATAAAAAGGG GTTAATTAGA TAATTGAAAT TATCCGCATT TACAAAAGGT AATAGGTTAG 1020  
 TTAGATTTTT CGAGTATGAC TcAATTTCTG CATTACGAGG ATTTTAAACA TAACGGTT 1078

(2) INFORMATION FOR SEQ ID NO: 662:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1398 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662:

AACTTGCTTT TTAGTATCTA CGTTAATATT AATAGCTTTA ATTTCACTTG TATTAATTAA 60  
 ATCAGCTGTG TAAATACCTG CTTTCAAATC GATAACTTTC TTTGTTCCAT TTTTAAAGTA 120  
 AACAGTATAT TTCGCTTGCT TCGATAGTCT TAAATCTATA TCACTAATAC CTCTGTCTGA 180  
 TTTTAAACT GATTTAACTC TATCCTCTAA ATCTTTATAA CTAATATTTT GATTCTTATT 240  
 AAATGTAAAG CTTGATAAAA TATTTTGGCT TGTACCGTTC ACAGTGaTTG CATATGGAAC 300  
 ATGGACTTTA GAATATCCAT GGTGTAACGA ACTTGATGAT TTATCTAATG GCTTAGCTGC 360  
 GGCAGACGCT TCATTATTAT TAAAGTTTGC ACCTGTTGAT GCTAAAACAC CTAATGCTAA 420  
 AGTTGTTGTA ATCAATGACT TAAATTTTCT AAATTATCTC TCCTTTTTTG TGTAATTCGT 480  
 ATTTGCAACT TAATTATAGC CAGACTTTCT CTATTTTTTG AATTAAGTGA ATATTAATAA 540  
 TAAATTATCT TTAACAATAA TTTTAAACA CTGTTAAAAG TTCTTTTAAT TTTGATTAAAC 600  
 TAATTAATTT ACAATACCTA AAATGTTGTT TGGTTTTGTT TATACCAAGC TTCAAAGTTA 660  
 AATGTCATAA CAACATTCAT TTCTTAATTC CTATTAGATT TGTCGATTAT ATTTACAGCA 720  
 TCTTTATACT CAAAAAACAT TTAAGTAAAA ATATAAATTC GATTTAATAA TTAATTTAAA 780  
 TTTAGTTAAT CAATTTTGCA TCTATTTTGT TGTAAGCTAT ATAAAAGGAG TGATAATGAT 840  
 GGTGAAAAAA ACAAAATCCA ATTCACTAAA AAAAGTTGCA ACACTTGCAAT TAGCAAATTT 900  
 ATTATTAGTT GGTGCACTTA CTGaCAATAG TGCCAAAAGCC GAATCTAAGA AAGATGATAC 960  
 TGATTTGAAG TTAGTTAGTC ATAACGTTTA TATGTTATCG ACCGTTTTGT ATCCAAACTG 1020  
 GGGCAATAT AAACGCGCTG ATTTAATCGG ACAATCTTCT TATATTAAAA ATAATGATGT 1080  
 CGTAATATTC AATGAAGCAT TTGATAATGG TGCATCAGAC AAATTATTAA GTAATGTGAA 1140  
 AAAAGAATAT CCTTATCAAA CACCTGTACT CGGCCGTTCT CAATCAGGGT GGGACAAAAC 1200  
 TGAAGGTAGC TACTCATCAA CTGTTGCAGA AGATGGTGGC GTAGCGATTG TAAGTAAATA 1260

CAACAAAGGC TTTGTTTATA CAAAAATAGA GAAAAATGGT AAGAACGTTT ACGTTATCGG 1380  
TACACATACA CAATCTGA 1398

(2) INFORMATION FOR SEQ ID NO: 663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663:

TTGTAATTGG AACGTACGAA CTTTTCTAGG TAAGAAACGT CGAATCTCGT CCTCATTATA 60  
ACCAACTTGT AGTCGTTTAT TATCTAAAAT AATTGGACGA CGTAATAAGC CAGGATTATC 120  
TTGAATGATT GAATATAAGT CTTGTAATGG TAGTGAATCA ATATCAACAT TTAATTTTTG 180  
GTATGTTTTA GAACGTGTAG AAATGATTTT ATCAGTACCG TCTTCAGTCA TTTTAAATAT 240  
TTGCTTAATT TCATCAATTG TTAAATGTTT AGAAAAAATA TTACGCTCCG TATACGGAAT 300  
GTCCaATGTTT tTGkTAACCA TGCTTTTCGCT TTTACGGcAA GATGTGcAaC TTGGtGaAGT 360  
aAATAATGtT ACCATACATC TCACTCTCCT ATTTGAATGA ATAAAATTCA TTGCTTAAAA 420  
TTTAGTTATA GATCAAGAAA AAACATTTTT TTCTAAAATT CTTAATCGTT ACTATTTATT 480  
ATAACTATCT AACATTAAAA TTAAATGAGA AAAACCTAAT TTTTCAGATA AGTTTCTACA 540  
CTTATAAAAA AGATTATTAA TCCCTTTGTT AGTAGTAAGT TATACGTATA TTCTAACACA 600  
TCTTACATTT TTAAGAAATA CTGTTATAAT GATAATTATT AAAATATTAC TAAGAAAGTA 660  
GGCATTTAAA TGGAGACATT ATTTTCAGGC ATCCAACCTA GTGGAATTCC TACTATTGGA 720  
AATTATATTG GCGCACTAAA ACAATTTGTT GATGTGCAAA ATGACTATGA TTGTTATTTT 780  
TGTATCGTAG ATCAACATGC AATTACAATG CCACAAGATC GTTTAAAATT ACGTAAACAG 840  
ACCAGACAAT TAGCAGCGAT TTATTTAGCT TCTGGTATAG ATCCAGACAA AGCAACATTG 900  
TTCATACAAT CTGAAGTCCc TGCACACGTA CAAGCAGGAT GGATGTTAAC TACGATTGCT 960  
TCTGTTGGAG AATTAGAGCG TATGACGCAA TACAAAGATA AAGCTCAGAA AGCAGTTGAA 1020  
GGTATACCTG CTGGTCTATT AACATATCCA CCTTTAATGG CAGCTGATAT TGTTCTTTAC 1080  
AATACTAATA TCGTTCCAGT TGGAGATGAC CAAAAGCAGC ATATCGAATT GACTCGTAAC 1140  
CTTGTAGATA GATTTAATAG TCGCTATAAT GATGTGCTTG TGAACCTGAA ATTCGTATGC 1200

(2) INFORMATION FOR SEQ ID NO: 664:

(A) LENGTH: 787 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 664:

10	TGTACCTTTT GCTTTAATAA ATACTGTTTC TTTATCATAA TTAGGTTTCAG TTAAGAAATT	60
	AAATTGTAAG CTTTGAGTAA TATTTTTTTG ACTATCACTT GTTGTAGCTG TACGTGTATA	120
	CATTTTAGTA TCACCATCAA GATTCTTCTC AGAAACTTGT TTGATTTTCAG AATTAATCTT	180
15	TGCAAATGAA GTAGCTGGTA ATACAGTGAA AGTAGTCGAT AGTGCTAAsG wACAAATTGT	240
	GATATTTTTA CATAGTTGTT TAATCATTAG TAATCCGCCC TTTCAATATT ATCCTTCTTT	300
	ATAAGGTTTA TTGTCATCAG AATATTTATC AACGACTTTA ACTGTTTTAT TTTTCCAATC	360
20	AACTTCATAA GTGACAATTA ATCTTTGACC ATCTTTATTT TtCtCTAAAA TTGGAGGTGC	420
	ATAATGTATy CCAGGTCTGT TTTTCAAAT ATCTTGATTT CGTGTGTATG TTAATTCAAA	480
25	TTGCGTTTTT TCATTTGACT TTTCATTAGA TAAATAAGTT AAAAATTCTG GATTAAAGCC	540
	ACTTCTTACT AATGCTGGGT ATCTATATTT TGAAGCAAAG CTTAGTTCaG GGTTTCTAC	600
	AGTAGCAATT CTCGTATTTT TATAGAATAA TAATTCATCA TTTCTATTTT TCACTTCTCC	660
30	ACCATACTTC AAGTCATTCT CAATAACTGA CCAGTGTACA TGgCCAGTTn ATTTATTTTT	720
	ACCGCTGGCA ATTGTGTCAT AATTTGCTGC ATCATCAACT AATCGTTTTG GAAGTAGCTA	780
	TTTGCTG	787

35

(2) INFORMATION FOR SEQ ID NO: 665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 665:

45

	TTATCTGTCA TTAACCACTG GTACATGTGA ACCCGGGCnTn AATCAATATA TATATTTAAA	60
	AGCAAAGGCG CGCCATGTGC CTTTtTTnTA tTTTGTATAT CTGTATCAAA ATCGATTGTA	120
50	TTAAAATCCG CTTTATTTTA TCATCTATTC AAATGATTTT AGTGCGCTTA TTTTACTATG	180
	GCATTATTGC CTAACCTGTT TGAGATATAT TAATATTTGA TGATTCGTAT TCAAAGTTTT	240
55	CATTAAACAT GTATTTAGTA TCATGATAGC TGCTTCATTG ATGATATACT ACCTACTTTT	300

CAGAGGCAAT ATTGAACAAT TCTTCATCAT GACTATTTTC CATCACATAA CTATGCTTAG 420  
 CGAACGCTAA CATATCTTTA TCATTATTTCG CATCTCCGAA GGCCATGAGC TCTGAAGGAG 480  
 5 ACATTTCCCA TTTATCTAAC AATCGTTTTA ATGCCTGnCC TTTAGTCATG TTT 533

## (2) INFORMATION FOR SEQ ID NO: 666:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 666:

GACTTCTCTT GCACTAAAAA TTGCTCAAAT TGCTCGCTGT CATAACCAGG CGGTGTTTCC 60  
 20 AACCATACAT ATATGCCACC TTTAGCATGA ACAAATGGCA AATCAGCTTT TGCAAGCATG 120  
 GCTTCGAATC GGTACAGACG TGTTTTAAAT ACATTGCTTT GTTCTTCTAA AAAATCATCA 180  
 25 TAATGGATT C AAAGCATATA TTGCGGTCAT CTTGTAAATG CACCAAACAT CCCAGCATTT 240  
 GTGTGCGTTT GGTACTTTTT CAAAGCTTGA AATCATATCT TTATTACCAA CTGCCAAAAC 300  
 CGACTCTGAA AACCTGGACA TGTTGATGAA CCTTTnAGAC AAGGGAAGAA ATTTGCAATC 360  
 30 GCAACATCTT TGCCCATTTT nCCGAAGCAA GTGnGACTAG 400

## (2) INFORMATION FOR SEQ ID NO: 667:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:

TCTCCAATGC TACTCAAATT AAAAAGGTTT TAAATATTGT TAATTCTGAT CCAGAGCGAA 60  
 45 AGATTGTTAT CGTTTCTGCT CCAGGTAAAA GACATGATAA TGATATTAAA ACAACTGATT 120  
 TGTTAATCAG ATTATATGAA AAGGTCATTA ATCATCTTGA TTATCATGAT AAAAAAGAG 180  
 AAATTATTCA GCGTTATGAT GATATTGTAA AAGAATTGCA AATGGATGAA AGTATTTTAC 240  
 50 GGACGATAGA TGTGACTTTG GAACATTATA TAAATCAATT AAAAAATGAA CCAAAGAGAC 300  
 TATTAGATGC ATTACTTTCT TGTGGTGAAG ATTTTAATGC GCaAyTGatA GCyTTATATA 360  
 ATAAtAGTCa gGTtACCAAC AAmAtWTATA TCCcCGAAGG AAGCGGGTAT TT 412  
 55

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:

TTACTCGTTA AAGATATTGT AAAAGATGAA GTGACAGAAT ATGACATTCA TCAAATGTTA 60  
 CCGCATCCGA TTAATATGGT AAGGGTTAGA CTTTTTGGTG TGAAATTAAA AGAGATTATA 120  
 GCTAAAAGTA ATAAACAAGA nTATATGTAT GAACATGCAC AAGGTTTGGG TTTCAGAGGG 180  
 AATATATTTG GAGGATATAT TCTTTATAAT TTAGGGTACA TTCATTCTAC AGGGCGTTAC 240  
 TATCTGAATG GAGAAGAAAT CGAGGACGAC AAGGAATATG TACTAGGTAC GATAGATATG 300  
 TATACGTTTCG GTCnTATTnC CCAACATTGA AGGATTACCA AAGAGTATTT AATGCCAGAG 360  
 TTTTTCAGAG GTATATTTAA nGAAAATTAT TGGCTATTTA 400

## (2) INFORMATION FOR SEQ ID NO: 669:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1236 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:

TGTTTCGATAT TTTTAAATTT ATCTTTTAAA TACAACAACCT GTTTCGGTAA TGATTTAACT 60  
 GTTTTATGAC TAATGCCATT GAATATTTCT AGCGTTTTAT TTAACCTATC GATAATCGCA 120  
 TGTAATCCT TCAAATGTC TTTTGTTC AAGTAAATA CATTATGGAA GCGATGAATA 180  
 TCATCATCAT AAACATCAGA ATCATTGATA ATCGTAAATA TCGTTGAGAA CAATTGCTCA 240  
 TTTAACTCAT GAATCTCATT CATACTAGCC TTCAAGCCAA AAATATCAAT TGGTGCAATA 300  
 TCTAATTTTT CCAAATTCG CTGCTTTTCC AGTTGATCAA TTGCCTTTAA CAATTTTCA 360  
 TTTTCGTTTT TACCAATCAA ACCAAGCTGA TATTTAATAT CAGCATAACT CAACTCATTT 420  
 GTCACCTGAT TTAAGGCATA GTCTGGTAAG CGATGTGCTT CATCCACTAT ACAATCATCA 480  
 AACAAATTGAT ATATTGAATT TTCAACATCA GAATGaATTA AATGTGCATG ATTTGTAATA 540  
 CCAATTTGaa TGTTCTGTGC ATTTTCGCTTA ATAAATTAT aATAATGAAC ATCGTGACGT 600  
 GCCGGTACAT ATGTTTCAAT TTTCTGGTca AAATACATCT TTTGACCACC TTTTAAATTT 660

	ATATTCACtT CGTAATTACT TGTGTCATCT TTTAAAATTT GACTAATAAG CCCCAATGAA	780
	ATGTAATCaC TTtTACTTTT AATCAATAGT GCATTAATTT TAAAATTCAA CGCTTCATTC	840
5	ATTGCTGGAA TATCTTTTTT TAACAATTGA CTTTGACAGTA ATTTAGTATT GGTAGAAATC	900
	ATGACATGCT TCCCAGTTTC AATATTATAC ATCAAGGCCG CAAGTAAATA TGCTAATGAT	960
10	TTACCACTGC CTAGTGATGC TTCAATCATT GCTTTTTTCAC TATGCATGAG CTGATCTAAT	1020
	ATAGTTTCCG CTAAATATAA TTGTTGCGGT CGATATGTTA AGCCAAGTTG ATCTACAGCT	1080
	TTGCTATATA AAGACTTCAA GCTGCCATTA TAATTTGTTG TCGGCTTTTT AAAATCAACT	1140
15	TGCTTACGAT AGATAATCTG TTCGAACTTT TCGTACGATT TATCCAATGG CTTTGCATCA	1200
	TATTGCCTAA CCATCTCAAA GAAAATATCA TACAAA	1236

(2) INFORMATION FOR SEQ ID NO: 670:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1819 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:

30	ACAsAATTAT TGACCAATAT GACTCGTGGA CTGATATGTT TAAAGCACTA CTGCATGAAA	60
	CATTTAAAGC ATATGGCGTT CTATTTATAG ATGCGCAGTT TGAGCCGTTA AGAAAAATGG	120
	AAGCGCCTAT GTTTAAAAAG ATTTTGAAAA AACATCAGTT GCTTGATGAT GCTTTTAGAG	180
35	CAACACAACA ACGTACTCAA AATCAAGGCT TGAATGCGAT GATACAAACA GATACAAATG	240
	TTcATTtATT CTTACATGAT GAAAATATGC GTCAATTAGT tTCGTATGAT GGTAAGCAyT	300
	TTAmATTAAA TAAAACAGAT AAGACATATA TAAAGGAAGA AATTATAAAT ATTGCGGAAA	360
40	ATCAACCKGA ATTATTTTCT aATAATGTAG TGACAAGACC ATTAATGGnA GAATGGTTAT	420
	TTGAACACGG TGGCATTtGT TGGAGGACCG AGTGAAATTA AGTaCTGGGC TGAActAAAA	480
45	GATGTATTTG AACTATTTGA TGTTGAAATG CcAtATCGTA TGCCAAGGCT TAGAATTACT	540
	TATTTAAATG ACCGTATAGA AAAATTACTT TCGAAATACA ATATTCCATT AGAAAAAGTG	600
	TTAGTCGATG GTGTTGAAGG AGAAAGAAGT AAGTTTATTA GAGAACAAGC ATCACATCAA	660
50	TTTATTGAAA AGGTAGAAGG TATGATTGAA CAACAGCGTC GTCTAAACAA AGACTTATTA	720
	GATGAAGTGG CGGGGAATCA AAATAATATT AACCTTGTGA ATAAAAATAA TGAAATTCAT	780
55	ATACAACAGT ATGATTATTT GTTAAAACGT TATCTTTTAA ACATTGAAAG AGrAAACGAC	840

5 GAAAGAATAT GGAATCCACT TCAAATTTTG AATGATTTTG GGACAGATGT GTTCAAGCCC 960  
 TCCACCTATC CACCACTTTC TTACACTTTT GATCATATTA TTATAAAACC TTAATATACC 1020  
 AAGGGTTTAG CCCGATTTAT CTTAATGATA AATCGGGCAT TTTTTTGTTT TTTAAAATAA 1080  
 ATTTCACAAA TTTTGTATAA ATAGTGGTGG ATAGTGGGGA GATGTGGTAA ATTATATATA 1140  
 10 AGGTGAGGTG ATAAAAAATG TTCATGGGAG aATACGATCA TCAATTAGAT ACAAAGGAC 1200  
 GTATGATTAT ACCGTCCAAG TTTCGTTATG ACTTAAATGA GCGTTTTATT ATCACAAGAG 1260  
 GCCTTGATAA ATGTTTATTC GGTTACACTC TAGACGAATG GCAACAGATT GAAGAGAAAA 1320  
 15 TGAAAACCTT ACCTATGACA AAAAAAGACG CACGTAAGTT TATGCGTATG TTCTTCTCTG 1380  
 GTGCTGTTGA AGTAGAACTT GATAAGCAAG GCGGTATTAA CATCCCTCAA AACTTGAGGA 1440  
 AATACGCTAA TTTAACTAAA GAATGTACAG TAATCGGTGT TTCAAATCGT ATTGAGATTT 1500  
 20 GGGATAGAGA AACTTGGAAT GATTTCTATG AAGAATCTGA AGAAAGTTTC GAAGATATTG 1560  
 CTGAAGATTT AATAGATTTT GATTTTAAA ATGGAGGAAT TGAAGtGTTT CATCATATCA 1620  
 GCGTTATGTT AAACGAAACC ATTGATTATT TAAATGTAAA AGAAAATGGT GTGTACATTG 1680  
 25 ACTGTACGCT AGGTGGAGCG GGACAnGCCC TTTATTTACT AAATCAATTA AATGACGACG 1740  
 GAAGATTAAT AGCAATCGAT CAAGACCAAA CTGCAATTGA TAATGCTAAA nGGGTATTAA 1800  
 30 AGGATCATTT GCATAAAng 1819

## (2) INFORMATION FOR SEQ ID NO: 671:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 609 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:

ACCAATTATT GGACAGGAAT TAGCAAAAAA TGCAATGCTT GCATTAATCT ATGCATCGAT 60  
 45 AGGTATCATC ATCTATGTAT CATTACGATT TGAATGGCGC ATGGGTCTTT CATCTGTATT 120  
 GGCATTATTA CATGATGTAT TCATTATAGT AGCGATTTTC AGTTTATTTA GAATTGAAGT 180  
 AGATTTAACA TTTATCGCCG CTGTATTAAC AATTGTCGGT TATTCAATTA ATGATACAAT 240  
 50 CGTAACGTTT GACCGTGTAC GTGAAAACCT ACAAAGGTT AAAGTGATTA CGACAACAGA 300  
 ACAAATTGAT GATATCGTTA ATAGATCAAT tAGACAGACA ATGACACGTT CAATTAATAC 360  
 55 AGTATTAACA GTTATTGTAG TAGTAGTTGC TATACTATTC TTCGGTGCTC CTACGATATT 420



TGCCGTTCCG CTATGGGGAA TAATGAAAAA ACGTCAGTTG AAAAAATCGC CGAAACACAA 540  
 ATTAGTTGTA TATAAaGAAA AGAAATCGAA CGATGAAAAG ATTTTAGTTT AAAAtGaATT 600  
 5 AAGCGGTAT 609

## (2) INFORMATION FOR SEQ ID NO: 672:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2222 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672:

CTTAAAACAG CAATTTGAAC GTTTACAAAA TGAACAAATC TTTGTTTATG TTTGTCATGG 60  
 20 TAATCACGAT CCTTTATCAT CAAAGATTTT ATCAAACCTGG CCAGATAATG TtntTGTATT 120  
 TTCAAATAAA GTTGAGACGT ATGAAGCAAT TACTAAATCT GGTGAAACAA TTTATATTCA 180  
 CGGATTTAGT TATGAAAATA GAGCAAGTTA TGAGAACAAG ATTGATGAAT ATCCATCAAG 240  
 25 TCAAGGCCAA AAAGGCATAC ATATTGGTGT CTTGCATGGT ACGTATAGTA AATCTTCAGT 300  
 TAACGAAAGA TATACCGAGT TCATTTTAGA AGATTTAAAC AGTAAATTGT ATCATTATTG 360  
 GGCTTTAGGT CATATACATG AACGTCAACA ATTAAGTGAT ATGCCTGTAA TTAAC TATTC 420  
 30 AGGTAATATT CAAGGTAGAC ATTTTAATGA GCAaGGTGAA aaAGGTTGCT TATTAATCGm 480  
 GGGTGACCAC TTAAaATTAA AGACTAAATT TTATCCTACA CAGTATATTA GATTTGAAGA 540  
 35 AGCAACTATT GAAACGGATA AGACATCTAA GCAAGGTTTA TACGAGGTCA TTCAAACCTT 600  
 TAAAGAACAA GTGAGAGAAG AAGGAAAAGC CTTTTATCGT TTAACGCTTG TTATTAATAG 660  
 TGAGACATTA ATTTACCTC AAGATTTATT ACAAGTTGAA GAAATGATTA CAGATTATGA 720  
 40 AGAAAACGAA AATCAATTTG TATATATTGA TGAGTTAAAA ATACAATATG CACAAAATGA 780  
 TGAGTCACCT TTAGTTAATG AATTTTCAGC GGAATTATTA GTCGATCAAA CTGTTTTTGA 840  
 TAAAGCGATG TCAGATTTAT ATTTAAATCC AAGGGCATCT AAGTTCCTAG ACGATTATGG 900  
 45 AACATTCGAC CATAACGCAT TAGTTAATCG TGCTGAAGAA ATATTAAAAG CTGAAATGAG 960  
 AAGGTGAACAA AATGATAATT AAATCACTTG AAATTTATGG TTACGGTCAA TTTGTTCAaC 1020  
 50 GTAAAATTGa ATTTAATAAA AACyTCaCTG AAA'TTTTTGG TGAAAATGAA GCGGGTAAAT 1080  
 CGACGATTCA AGCATtCATC CATTCGATAT TATTTGGATT TCCAACTAAA AAGTCTAAAG 1140  
 AGCCAAGACT AGAACCACGT CTAGGTAACC AATACGGTGG TAAATTAGTA CTTATTCTTG 1200

TATATTTACC TAATGGTGCT GTGCGTGATG ATGCTTGGTT ACAAAGAAA CTTAATTATA 1320  
 TTTCTAAAAA GACATATCAA GGTATCTTTT CATTTGATGT ACTAGGGCTT CAAGACATTC 1380  
 5 ATAGAAATCT AAATGAAAAA CAATTGCAAG ATTATTTATT ACAAGCmGGG GCTTTAGGAT 1440  
 CAACTGAaTT CACGTCAATG CGCGAAGTGA TTAATCGTAA AAaAGATGAA TTATATAAAA 1500  
 aATCAGGTAA AAATCCGATC ATTAATCAAC AAATTGAGCA ATTA AAAACAA CTAGAAAGTC 1560  
 10 AAATTCGTGA AGAAGAAGCA AAGCTAGAAA CATATCATCG CTTAGTAGAT GATCGAGATA 1620  
 AATCATCACG TCGATTAGAG AATTTAAAGC ATAATTTAAA TCAATTATCA AAAATGCATG 1680  
 15 AAGAAAAACA AAAAGAGGTT GCTTTACATG ATCATT CACA AGAATGGAAG TCTCTAGAAC 1740  
 AACAGTTAAA TATTGAGCCA ATCACATTCC CAGAAAAAGG TGTGGATCGT TACGAAAAAG 1800  
 CACGAGCGCA TAAGCAATCG TTAGWAAGAG ATATTGGTTT AAGAAATGAG CGTTTAGCTC 1860  
 20 AACTTAAAGA AGAAGCGACT CAATTAGAGC CAGTTAAACA ATCTGATATT GACGCCTTCA 1920  
 TTAGTTTGAA TCAACAAGAA AATGAAATTA AAAATAAAGA ATTTGAACTT ACTGCAATCG 1980  
 AAAAGGATAT TCGGAATAAA CAACGTGATA AAGATGAATT GCAATCAAAT ATTGGTTGGT 2040  
 25 CTGAAACGCA TCATGACGTA GATAGTTCAG AGGCAATGAA AAGTTATGTC AGTGAGCAAA 2100  
 TCAAGAATAA ACAAGAACAA GCTGCATACA TTAAACAATT AGAACGTAGT TTAGAAGAAA 2160  
 30 ATAAAATCGA AGATAATGCG GTTCATAGCG AACTAGATTC TGTTGAAGAA AAATAGTTCC 2220  
 TG 2222

## (2) INFORMATION FOR SEQ ID NO: 673:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673:

TTGCAGGTAT CATTTTTTTTA ATGCCATATG GATTATGTTT TCTACCGTTT TATAAGCAAA 60  
 45 AAAAGAAAAA ACAGACATTT AAAAAATACA TGGTTTACAC TACGATTGGT TTGTCAATTT 120  
 GTCTAGGCTT ATCTCTAGTT TTGGTTCACA CTACGAAAAT TTATATGGAC GAAGGTGGCG 180  
 50 TAAGATACTA TTACGGTAGT TTTGTAATGA AACAAAGCGG CGGTTATGCT TATTTAGCTT 240  
 TAGCGGTACT TTCAACGTTG TTAATTGTTG CGAAAAAGC TACAAATAAA AATAAAGAAA 300  
 TCGAAACCGT CGACAATACA AATATAACGG AAAGATAATT AAGGGAGTGC TCATTCAGGA 360

## (2) INFORMATION FOR SEQ ID NO: 674:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 927 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674:

CCACTTTGTG GATTTTCTTT ATATTCTCCA CGCTTGtACT ACAACTTCTT TCGTTTCTGT 60  
 TTCATCACCG ACTGCCGCAT TCGTTAGCAC ATGTAATAAC TCTTTTGCGG TTAATACATT 120  
 CTCATCTATA ATCTTATCTT TTTGTTCTTG TATATATTGC TTGATGTGCG GCTTTTTCAA 180  
 TAACCTACAC GCTGTCACAT GTGCGCTATT TGC GTTATAT CCTGyTTT TA TGGCACTTG 240  
 TGTTACATTC AGTGTCTAA TATACTCATT CACAAAACGT GCTTGCTTTG CAGTTAACTC 300  
 ACTCATTTTA TCACCCCCAC AATTTTATCT AATATGGTTT CATACCATAA TATTACAGAT 360  
 TGTCTGAAC AATCTAAGGC ACTACTAATA TCTTGATAAC TAAGTCCTTG TATAAGGGAG 420  
 TCAAAAATAT AAAACTCTTT ATCGGTCGCT AATCTGTCAA CAATCATTTT TATGTGATTC 480  
 TTTATAATAT GATCATTGAC ATTATCGTCT GTCATCAATT CGTCAGAATC TTCATCACCT 540  
 ATTAAAAAGA AATCATCAGT ATTTATTTCA TCATCGCCCC GTTAACTAGC TTTGAAGTCT 600  
 TTAGCACACT TGCATATACC GGCTGTCGTG CTGGCKAGAT ACTAGCATTG AAGTGGTCTG 660  
 ATATTGATTT TGAAAACAAC ACGATTAGTA TTAATAAAAC ATATTACAAT CCAAATAATA 720  
 ACAAGAAGAA ATATCAGATA CTTCCCCCTA AAAGTGAAG TTCTATCGGT AAGATTTCCG 780  
 TTGACCCAAA TGTAATAAAG GtGtTGCgtG ATTATAAGAT AAACGTTCAA AATAATTGGA 840  
 AAAACGAATT ATATAATGAT AACCATTGTA ATGAAAAAAC TATCAATGTG GATACAAACC 900  
 ATTATGTCAC GTACCAGCAT ACTCAA 927

## (2) INFORMATION FOR SEQ ID NO: 675:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675:

GATGTTAAnA TAAGTACATC ATTTTGACTC CCAAATATTG GCTTTAGACC TTGAAATGCT 60

CTCATAATGG CATCAGGTAC cAGGGGTTGG GaCCAGGTGT TAATAACAAC GGTTGATGAT 180  
 AATACATTTA TATGCCTCCT ATAAATAAGA TTTCACTATT TTAGCAAATT TTCTGAAAAT 240  
 5 TTAAGAGCCT AAAAAGtGAT AACGCTATAT TGTCGAACAA ACGTTATCAC TTAACGATTT 300  
 TATTTGGCCT GAATGATGGG ATAGATTTTT ATGTCCACAT TATTTCTTAC AGCATTTGAA 360  
 ATCATGCAAT TATTATCTGC AATTGTTATC AATTTTGGTA ATCGCTTTTC TAATTGTGCT 420  
 10 ATTTGATCAC TTGGAATTTG AATTTGAGGA TGGTGACAA TTTTGTGACAT ACTGAATTTT 480  
 CCGTTATTTA AACAAGCTGT TCCAATCGAT TGTTGTkCAA TTGAAATATC TGTGAACCTT 540  
 GCACGTTCAA GAGTAGCTGC TAATGAGATG ATATAACATG ATGAAGCGGC TGATACTAAC 600  
 15 ATTTTCATCGG GATTTGTTCC TATACCAACA CCACCTAAAG AAGCAGGTAT AGAAATATTC 660  
 TCTGAAAGTA TGTCGCCTTG AACGTTTCCG ACATTGTTAC GACCACCTTG CCAAGAAGTT 720  
 TGGACTTTAA AGTCATGTTG ATGCAATTGC TTTAACCTCC AATATAATTG TGATAGTTTA 780  
 ATTTTAGAAT AGTTTATCAA AGTTTAACAG AAAGGTGACT TATCAATGAC TCTGAATAAA 840  
 CTGAAAGATG AATTACAAAT TGTTTCGCAC CGTGGATTGC CGAGTGATTT TCCTGAAAAT 900  
 25 ACAATGGTCG GTTATCGAGA GGTAATGGGG CTCAATGTTG CTATGTTAGA AATAGATGTT 960  
 CATTTGACCA AAGACCAACA TTTTGTGTG ATACATGaTG AAACAATTGa TAGAACATCG 1020  
 GaTGGtArGG GGCCTAwTGc TGaTTACACA TTATCGCAAT TAAATCATT TGATTTTGGT 1080  
 30 AGTTATAAAG ATGTTGCTTT 1100

(2) INFORMATION FOR SEQ ID NO: 676:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 460 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:

ATTAATTTCA TATGGAAATA GTTGAACATA CTGCGCTGTA TAAGCTTCAA CAGTTTGATG 60  
 45 AATTAACGAT TGATCTTCAA TATATCCGTA GAACAAATCT TCAGTACAAA CTACTTTACC 120  
 TTTATCAGGT TTAATTGCAC CTGCCAACAA TTGACCTACC AACGCTTTGG AAGATTTCAGG 180  
 50 TTCACCAATT ATACCTAATG CTTCTCCTTG ATAAATATGT AAATAATAT TGTTTAAATC 240  
 GATATCTTCA GCATCATATC CAAAAGGTAA ATACCATTTT TTATTCTGTT TATTCCTATA 300  
 GTAGTGTGTT ACTTTTAGTA ACTTTAAAC AATTGAACTT CCCATCTATT TTCATCCTTC 360

CCCCACGCaA AAATACCTTT TAATCTTnCT ACTTTAAAAT

460

(2) INFORMATION FOR SEQ ID NO: 677:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:

15	GTCAAGTTTT CGGCTAGATT TTAAACGCTC ATCACTATGT AGAATGAAAC TTTCGAAAAA	60
	CTGTAAATCA TCATAACCTT TTACATAAAC ATAACCTTCG CCACCAATTG CTTGAATTAA	120
	ACATTGGGCG GCCATTTGAA TTTCTAAAGA TTGTTTTTCT AGCCTATTAA AGATACCTAT	180
20	TAGTTGTGTG TTTAAGATTT TTGACATCTT TATCCTCCAA TCTACTTATA AAATATTGTA	240
	ATTAATGACT ACATATTATG CAACGGCTTA AATTGTATAA AAATGTATAC GTTTGCATTT	300
	AGTATAACTA TCGCATTTTT CAAAAATAC ACATTTAATC TGCAGTATTT CAATGCATTG	360
25	ACGCTATTTT TTTGATATAA TTACTTTGAA AAATACGTGC GTAAGCACTC AAGGAGGAAC	420
	TTTCATGCCT TTAGTTTCAA TGAAAGAAAT GTTAATTGAT GCAAAAGAAA ATGGTTATGC	480
	GGTAGGTCAA TACAATATTA ATAACCTAGA ATTCACTCAA GCAATTTTAG AAGCGTCACA	540
30	AGAAGAAAAT GCACCTGTAA TTTTAGGTGT TTCTGAAGGT GCTGCTCGTT ACATGAGCGG	600
	TTTCTACACA ATTGTTAAAA TGGTTGAAGG GTTAATGCAT GACTTAAACA TCACTATTCC	660
35	TGTAGCAATC CATTTAGACC ATGGTTCAAG CTTTGAAAAA TGTAAGAAG CTATCGATGC	720
	TGGTTTCACA TCAGTAATGA TCGATGCTTC ACACAGCCCA TTCGAAGAAA ACGTAGCAAC	780
	AACTAAAAAA GTTGTTGAAT ACGCTCATGA AAAAGGTGTT TCTGTAGAAG CTGAATTAGG	840
40	TACTGTTGGT GGACaAGAAG ATGATGTTGT AGCAGACGGC ATCATTATATG CTGATCCTAA	900
	AGAATGTCAA GAACTAGTTG AAAAACTGG TATTGaTGCA TTAGCGCCAc ATTAGGTTCA	960
	GTTTCATGGTC CATACAAAGG TGAACCAAAA TTAGGATTTA AAGAAATGGA AGAAATCGGT	1020
45	TTATCTACAG GTTTACCATT AGTATTACAC GGTGGTACTG GTATCCCGAC TAAAGATATC	1080
	CAAAAAGCAA TTCCATTTGG TACAGCTAAA ATTAACGTAA AACTGAAAA CCAATCGCT	1140
50	TCaGCAAAAG CAGTTCGTGA CGTTTTAAAT AACGACAAAG AAGTTTACGA TCCTCGTAAA	1200
	TACTTAGGAC CTGCACGTGa AGCCATCAAA GAAACmGTTA AAGGtAAAAT TAAAGAGTTC	1260
	GGTACTTCTA ACCGCGCTAA ATAATTAATA TTAGTCTTTT AAGTTATTAA TAACGTAGGG	1320

AATAAATAAA ACAGTTTGAT TTAAAAATGA AAGCGTAAAA ATGGTAAAAT ATATCAAAAT 1440  
 TGATTGTGAT A 1451

(2) INFORMATION FOR SEQ ID NO: 678:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 668 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:

nGTATTGAAG CGGTTAAACA AACACCTAAT GCAACTGACG AAGAAAAGCA GGCTGCTGTT 60  
 AATCAAATCA ATCAACTTAA AGATCAAGCA ATTAATCAAA TTAATCAAAA CCAAACAAAT 120  
 GATCAGGTAG ACACAACTAC AAATCAAGCG GTAAATGCTA TAGATAATGT TGAAGCTGAA 180  
 GTAGTAATTA AAACAAAGGC AATTGCAGAT ATTGAAAAAG CTGTTAAAGA AAAGCAACAG 240  
 CAAATTGATA ATAGTCTTGA TTCAACAGAT AATGAGAAAG AAGTTGCTTC ACAAGCATTA 300  
 GCTAAAGAAA AAGAAAAAGC ACTTGCAGCT ATTGACCAAG CTCAAACGAA TAGTCAGGTG 360  
 AATCAAGCAG CAACAAATGG TGTATCAGCG ATTAAAATTA TTCAACCTGA AACAAAAGTT 420  
 AAACCAGCTG cACGTGAAAA AATcAATCAA AAAGCGAATG AATTACGTGc TAAGATTAAT 480  
 CAGGATAAAG AAGCAACAGC AGAAGAAAGA CAAGTAGCAC TAGATAAAAT CAATGAATTT 540  
 GTAAATCAAG CCATGACAGA TATTACGAAT AATAGAACAA ATCAACAAGT TGATGATACA 600  
 ACAGTCAGCG CTgATAGCtT GCTTTAGTGA CGCCTGACCA TATTGTTAGA GCgCTGCTAG 660  
 AGATGCGT 668

(2) INFORMATION FOR SEQ ID NO: 679:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1906 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 679:

GATCCAAATT TAAAAGGAAA AATAGCCTTT AACGAATTTA CGAAACAAA TGAATGTTTA 60  
 GGGAAAGTGC CATGGAATAC TAATTTTAAG ACACGTCAAT GGCAAGACGG TGATGATAGC 120  
 AGTTTAAGAA GTTATATCGA AAAGATTTAT GACATACACC ATTCAGGTAA AACAAAAGAT 180

	ATCGTGGGAT GGACATAAAC GCCTTGAAAA GTTATTTATC AAATACTTAG GTGTTGAAGA	300
	CcTGaAGTGA ATAGAACAAC TACCAAAAA GCATTGACTG CTGGAATCGC TAGAGTAATG	360
5	GAGCCTGGAT GTAAATTGTA CTATATGCTT AACTTTATG GTCCTCAAGG TGTAGGTAAA	420
	TCTGCTTTGC TAAAAAATT AGGTGGTGCA TGGTTTTCTG ACAGTTTAGT TTCTGTTACA	480
	GGTAAAGAAG CTTATGAGGC CTTACAAGGC GTTTGGCTAA TGGAAATGGC AGAACTTGCA	540
10	GCTACAAGAA AAGCTGAAGT TGAAGCTATT AAGCATTTCA TATCTAAACA AGTTGACCGA	600
	TTTCGTGTTG CTTATGGGCA TTATATTGAA GATTTTCCAA GGCAATGTAT TTTCATTGGT	660
	ACAATAATA AAGTTGATTT CTTAAGAGAT GAACTGGTG GAAGACGTTT TTGGCCAATG	720
15	ACTGTAAATC CAGAGAGAGT TGAAGTGAAC TGGTCTAAAC TAACCAAAGA TGAGATTGAC	780
	CAAATTTGGG CAGAAGCTAA AACTATTAT GAACAAGGAG AAGATTTATT CCTTAACCCT	840
20	GAAGTAGAAG AAGAAATGCG TTCAATACAA AGCAAACATA CTGAGGAATC TCCATATACA	900
	GGCATTATTG ATGAATATCT TAACACACCm ATTCctAGCa ATTGGGATGA CTTAACTATC	960
	TTTGAACGAA GACGATTTTA TCaAGGTGAT GTTGATATGT TACCacAGG AAATGTaGAT	1020
25	TACGTTAAAA GAAATAAAGT CTGTGCGCTT GAAGTGTTT TTGAATGTTT TGGTAAAGAT	1080
	AAGGGAGATA GTAGAGGATC TATGGAAATT AGAAAGATTT CAAACATCTT AAGACAATTA	1140
	GACAATTGGT CTGTATATGA TGGTAATAAA AGTGGGAAAA TTCGATTTGG AAAAGATTAT	1200
30	GGTGTAACAGA TAGCTTATGT AAGAGATGAA AGTTTAGAGG ATTTAATATA AGAAATATTG	1260
	AATAAATATG CATTTTAGAG TGTTGTATCA GATGTTGCAT CATTTTTTGA GTGATGCAAC	1320
	ACGGGAGTGT AAAAAGTAAT CGTAGGTGTT GTATCATTTT TGGTGATGCA ACATTGATGC	1380
35	AACAAATGAT ACAACACCTC TTTCTTTTCT AGCTGTAGGG TTCAACCCTG TTTGTTTCCA	1440
	ATGTTGCATC AAATTCAC TAAGTTTAA AAAGTAGTGT TAGGGAGTAA AGGGGTATAG	1500
40	GGGTAACCCT CTAACAGCTA TTTTAAAAAG TTTGGCAAGA ATTGATACAA CATCGGAACA	1560
	CAAATATAAA TTTTGTATAC AAGGTGAATA AATGAAAGAA TCGACATTAG AAAAATATTT	1620
	AGTGAAAGAG ATAACAAAGC TAAACGTTT ATGTTTAAAA TGGGTGCGCAC CTGGAACAAG	1680
45	AGGTGTGCCA GATAGAATTA TTATTATGCC AGAAGGAAAA ACATATTTTG TAGAAATGAA	1740
	GCAAGAAAAA GGAAAGTTGC ATCCTTTACA AaAATATGTG CATAGACAAT TTGAAAATAG	1800
	AGaTCATAAA GTaTATGTGT TATGGAATAA AGAACAAGTA AAaACTTTTA TCAGAwTGGT	1860
50	AGTGAACATT TGGCGATTGA CTTTCAAACC ACATAGCTnT CCAAAG	1906

(2) INFORMATION FOR SEQ ID NO: 680:

(A) LENGTH: 948 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 680:

10	AATTATTTGA ATAAATTAGC AATTAAAGAG TTGATTTGTC AGTTTAAGyA TTTGAGTGCA	60
	TTTGAAAAAG ATGTCATGTA TTTAATGTGT GAACAATATA AGCCGAGAGA AATTGCTCAA	120
	TTGATGCATG TAAAAGAGAA AGTGATTTAT AATGCCATAC AACGATGTxA AAATAAAATA	180
15	AAACGTTATT TCAAAATGAT TTGAAAAGCG CCTTAGGACG TGAATTGAAT TATAACGTGT	240
	TACTTACTGA TGGTTTGACA TTTGTTATAA ATTTTATGTA TAGTATACTG GTATTATAAT	300
	GAATAAAGGT GAATTATTGT GAGAAAAATA CCTTTAAATT GTGAAGCTTG TGGCAATAGA	360
20	AATTATAATG TTCCTAAGCA AGAAGGCTCG GCAACAAGAT TAACCTTAAA GAAATATTGT	420
	CCAAAATGTA ACGCGCACAC AATTCATAAA GAATCGAAAT AAATACATTC GAAATAATAC	480
25	TTTGATAATA TGTTCAAAGG ATTTGGAGGT TGAGCAGATG GCTAAAAAAG AAAGTTTCTT	540
	TAAAGGCGTT AAGTCTGAAA TGGAAAAAAC AAGTTGGCCG ACGAAAGAAG AGCTATTTAA	600
	ATATACTGTA ATTGTAGTTT CTACTGTTAT ATTCTTCTTA GTCTTTTTCT ATGCCTTAGA	660
30	TTTAGGAATT ACAGCATTGA AAAATTATT ATTGGTTAG AGGAGTGAAG ACATGTCTGA	720
	AGAAGTTGGC GCAAAGCtTG GSTATGCAGTG CATACATATT CTGGATATGA AAATAAAGTT	780
	AAAAAGAATT TAGAAAAAAG AGTAGAATCT ATGaATATGA CTGAACAAAT CTTTAGAGTA	840
35	GTCATACCGG AAGGAAGAAG GAAACCTCCA GTAAAnAAGnT GGCCAAGCCT AAAACCGCCT	900
	GTAAAAAAA ACCATTCCCC TGGGnTAnGG TTTTAAGTGG GAATTTAA	948

(2) INFORMATION FOR SEQ ID NO: 681:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 863 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

50	ACAnATAATA ACAAAGCGCT TGCTAGTACC TCTTAAAAAG ATGATGCTAG CAAGCGCTTk	60
	TCTATACTAT ATATTATTTT TCTAAAATTT TAACACCCTC TTGAGTGCCT ACAATAACTT	120
55	GATCTGCCAT ATCTAAGAAG TATCCTGTCT CAAACACACC TGTCAGATGA ATTAAATACT	180



TATCAGTTAT AAATGCGACA TCTTCGTTTA CACGACGTTT TACTTTTATA TCAGCGTATG 300  
 ATTCAATTTT ACGTAATATG TGATACCAGT TAAATTTATC CACCTCTACT GGTAACCTAA 360  
 5 ACGTCTCACC TAAGTATTGA ACTATTTTCG TTTCATCGAC AACCACAACA AAACGCGATG 420  
 CCATTTTCATC TATAACTTTC TCTCTGAACA GCGCACCACC GCCACCTTTA ATTATATTTA 480  
 AAGATGGATC TACTTCATCA GCACCATCAA TTGCTAAGTC GATATGATCA ACATCATTGA 540  
 10 TTTCACATAT TTTAATACCT AATTCTTTTG CTAAAAATGC AATTTTATTA GAAGTGCATA 600  
 CACCTGTAAT ATTGTAACCA CGTTCTTTAA TTAGTTGCGC CATTTGAGGT AAGAGTAATT 660  
 15 CCATTGTACT TCCTGTACCA ATTCCCAGCG TCATGTCACC ATTGATTkGA CTTAAAACAT 720  
 CATTTAATGT CATTAACCTG AGTGCTTTGA CATCTTTCAT GAAGGTAGCC TCCCATATTT 780  
 AtGTAATCTA TTCAATTCAT ATTTTACATG ACTCGTATAA ATTAACATAC CCTTATnGCT 840  
 20 AACCATTTGT GTTAAACATA TCG 863

(2) INFORMATION FOR SEQ ID NO: 682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 682:

TTCATTTTTG TTGTTTCAGCA ATTTTGGTCC GAATTTCAAT TCATCAGATG ATAGCTCTAT 60  
 35 TAATTCTGTA GAATATTCTG CtACAACAAT TTCATAAATA TGGCCTTTTT CTTCCATTAT 120  
 TATTTTCATCa ATTATTTTCAT AATTCAATTG TTGTAATGTT TGTCTTAAAT TTTCAGTTTG 180  
 GATATTACTT TGTA AAATCA ACCTTGGATG TTGACTTAAC TTATCTTGCC CATCTTTTAA 240  
 40 AATTTTAGCA ATAAGTGGTC CGCCCATACC ACAAATTGTG aTATTATCGA TTACGTCCTC 300  
 AGGTTGAATA AACTTTAAGC CATCCCCTAA ACGTACATCA ATTCTATCTA CTAATTGGTT 360  
 TGCAGCTACA TTTTTCACAG CAGCTTGAAA AGGGCCTTGA ATA ACTTCTC CAGCAATAcc 420  
 45 GaTTTCGCATA AATGGTTTTG AATTGCATAG ATTGGCAAAT AAGCATGATC TGAGCCAATA 480

(2) INFORMATION FOR SEQ ID NO: 683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 689 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 683:

CTGCAAAAAA TATTGGTATA ATAAGAGGGA ACAGTGTGAA CAAGTTAATA ACTTGTGGAT 60  
 5 AACTGGAAAG TTGATAACAA TTTGGAGGAC CAAACGACAT GAAAATCACC ATTTTAGCTG 120  
 TAGGGAAACT AAAAGAGAAA TATTGGAAGC AAGCCATAGC AGAATATGAA AAACGTTTGTAG 180  
 GCCCATACAC CAAGATAGAC ATCATAGAAG TTCCAGACGA AAAAGCACCA GAAAATATGA 240  
 10 GTGACAAAGA AATTGAGCAA GTAAAAGAAa AAGAAGGCCA ACGAATACTA GCCAAAATCa 300  
 AACCACAATC CACAGTCATT ACATTAGAAA TACAAGGAAA GATGCTATCT TCCGAAGrTT 360  
 15 gGcCCAAGAA TTGAACCAAC GCATGACCCA AGGGCAAAGC GACTTTGTTT TCGTCATTGG 420  
 CGGATCAAAC GGCCTGCACA AGGACgTCTT ACAACGCaTA AcTACGCACT ATCATTcAGC 480  
 AAAATGACAT TCCCACATCA AATGATGCGG GTTGTGTAA TTGAACAAGT GTACAGAGCA 540  
 20 TTTAAGATTA TGCGAGGAGA GCGGTATCAT AAGTAAAACT AAAAAATTCT GTATGAGGAG 600  
 ATAATAATTT GGaGGGTGTT AAATGGkGGa CaTTAAATCC mCGTTCATTC mATATATAAG 660  
 ATATATCACG GTAATTGCGC ATATAACTT 689

## (2) INFORMATION FOR SEQ ID NO: 684:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 858 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 684:

TTATTAAATT GGTATGTGTT CATTATACAT ATGaCAAATA TGaATGTAAA CCGATAATTT 60  
 AGATTTTTTTG GAATAACCTG AAAATTCAAG TTaTAGCGTT GCTTATATTT TAAAAGGTGG 120  
 40 TGATAATGAG ACTTTTTGAA AAATAAAATT CAAAATACTT ATAGCATAAT CAATATGCAC 180  
 ATTAAATAAAA TGTACTCTTT TAATGCGTTG ATAAGTGTAT TTGTAATTTA GAGAAGGGGT 240  
 GTTCACTATG CTGATGTGTT AAAAAATAAA ATAAAAAGGA CACCTCGATG CTATAAATAT 300  
 45 TAGCATCGAG ACGCCAGTT AATGTCTATT AAATTGAATA TAGTCTCGGA CATGAATCAA 360  
 TGCCCTAGGC CCTGCAATGT TATATTGACA GTAGTTGACT GAATGAAAAT GACTTTGTAG 420  
 50 CTAGCTTTTT TCAATCCTTG TCGGTGCAAC ACATAGAGAA ATTGGATTCC TAATTTCTAC 480  
 AAACAATACA AGTTGCGGAA TAAGTCCCAA TATAGAAGGT GACAGTAAGC CAACTTACAA 540  
 TAATGTGCAA GTTGGTCGGG CCTCAATACA GAGATTTTCG AAAAGAAATT CTACATATTA 600

GCCACCTTGT TTATTTAAAT CGATAACACG GTTTGCgATT GTATTGATAA ATTCAAAGTC 720  
 ATATGAAGTA AAGATAATAG AACCTTTGAA TGATTTAAGT CCATCATTAA CAGCAGTAAT 780  
 5 ACTTTCTAAG TCTAAGGGTT GTGGGTCATC AAGTAAAAGA CGTTGCCCTG ATAACATCAT 840  
 TTACTAGCAn CACGACTT 858

## (2) INFORMATION FOR SEQ ID NO: 685:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 685:

TTAGTATTTT CAGGnTGGAa ATTGATGTTT GAAATTCaCT GAAATGGGCC AGAACCTgAA 60  
 ATGaAACTTT ACCAACAATT TGGtCTTCAT CAATGAGGCC AAACGCACGG CTATCTTTAC 120  
 TTACTTCACG ATTATCTCCA AGCACTAAAT ATTTACCTTT TGAATGACA TTTGATTTAG 180  
 25 GATTGCGATT CGGTAAATCT TTAACCTGGA AAGTCCCAGT AATGTAATCA CCTTGTTTAT 240  
 GTTTTAAATT GTAGTTTAAA TATGGTTCAT CTTGTTTTTT ACCATTGACA TATAATGTAT 300  
 CATTTTTGTA TTCTACTTTA TCACCAGGAA CACCGATGAC ACGTTTAAcA TAGTCATCAT 360  
 30 TTTTGTTTGC ATGGAAGACA ACTACATTAC CTTTTTCCAA ACCACCTGTT TTATATCCAA 420  
 CAATGTTTAC AGCTACTCGC TCGCCATCTT TCAAAGTTGG ATCCATTGAT TCACCTTTAA 480  
 35 TTGTATATGG CGTAACAATA AATTTACCTA CTATAAATAA AATGACAAA GCGACTGCAA 540  
 TGAAATAAT CCATTCCAAT ATTTCTTTTT TCAATTTTGA CACCTCTTTT TAAGATTTGA 600  
 ACTGAACAGT CCATTTTGAA AAAGGATAGT ATCGTAAAcT AACATTACCA ATAATAcCCT 660  
 40 TTTTATCGAT TAAACCAAAT TGTCTTGAAT CGTGCTTGtK ATTATCTTGA TCATTTAGCA 720  
 CAACAAAATT GTTTGGCGGA ATAATATCAC CATCTAATTC TTTAAAATTG CGCAAACtAA 780  
 AATCTTTAAT TTTTCTGTTC TTGGCATAAG ATGCGTCAAC CGGTCGGTCA TCACGGTATA 840  
 45 ATTGTCCCTG ACGAAACGCC ATTGATTGAC CAGGTTTGGC AATAATTcGA CTAGTATATA 900  
 TCTCGTTACC ACGCCTATAT GTAATGATAT CACCATTATT CAATTGATTA AATGTAACtT 960  
 50 TAATTTTATT TACAATAACA CGATCCCCTT TGTTAAGGGT TGGTGACATA TCATTATTcG 1020  
 GAATGACATG ACCAACTATT ACAAAGTTT GTACGAACAG TACAATGATA ATAGCAAGTA 1080  
 TCAATGAAAT CAAATATTTT ACAACTTTTT TCACGATGTC ACTCCTTTTT CGATCCCATA 1140

ATCCCTCTTA AAGGATGCGT TAAAATTGTA GTAATTTCTT TACCTAAATA ACCTAAAATA 1260  
 ATTGTTGAAA CTAACCTTGA TGATGCCAAA ACAATGAAAT AATATTTAGG TCTAATATGA 1320  
 5 GATAGACTCG CTACAAAATT TATTAATGTA TTTGGCGTAA AAGGAAAACA AAGTAAAATA 1380  
 AACAAATGGGA TTAATCCTTG GCGATCAATA AAATAATCA AGCGTTGAAC AGCAGTACGT 1440  
 TGTTTAATTC GCTGCATCCT CTCAGTGTTT ACCAATCGTT TACAGATCAA ATAGACTGTA 1500  
 10 AATGTTCCAG AAATTAATCC AAGCCAATA ATCAATATAC CTAAAATAGG TCCATAAGCT 1560  
 TGAATGTTAA TTAAAATATA GAGTGCTAAA GGAAATACTG GAATTATAGC TCTAATATAT 1620  
 AACAAATATA ATCCAGGTAA ATAACCAAAC TGTCGAAATA TCTCAAACCA TTCTTCTACT 1680  
 15 TGATGAAACG ACAAATCATC AATCCCTTTC TTTGGTTGAA GATAATTATT CTTACATTAT 1740  
 AAAGTTA 1747

(2) INFORMATION FOR SEQ ID NO: 686:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 645 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 686:

30 CGTAAAGATT ACTATTTAGG AGGGTGACTA TGAAAAAGAA ATTAGGTATG TTAATTCTTG 60  
 TACCAGCCGT AACTTTATCA TTAGCCGCAT GTGGGAATGA TGATGGAAAA GATAaAGATG 120  
 35 GCAAGGTAAC AATTWAAcGa CaGTTaTCCm TTGCAATcAT TTgCAGAGCA AATTGGTGGA 180  
 AAACACGTGA AGGTATCATC AATCTATCCA GCAGGGACAG ATTTACATAG CTATGAACCA 240  
 ACACAAAAAG ATATATTAAG TGCAAGCAAG TCAGACTTGT TTATGTATAC AGGGGATAAT 300  
 40 TTAGATCCGG TTGCTAAGAA AGTTGCATCT ACTATCAAAG ATAAAGATAA AAAACTGTCT 360  
 TTAGAGGATA AATTAGATAA AGCAAAGCTT TTAAGTATC AACACGAGCA TGGTGAAGAG 420  
 CATGAACATG AGGGACATGA TCATGAGAAA GAAGAACATC ATCATCATCA TGGTGGATAT 480  
 45 GATCCACACG TATGGTTAGA TCCTAAAATT AACCAAACCT TCGCTAAAGA AATTAAAGAT 540  
 GAATTAGTGA AAAAAGATCC AaACATAAA GATGACTATG AGAaAAACTA CnaAAATTAA 600  
 50 ACGACGATCT TAAGAAAATT GATAACGATA TGAAGCAAGT TACAA 645

(2) INFORMATION FOR SEQ ID NO: 687:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 956 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 687:

5	TTTGTACTG CTTCTAAAAT AATATCCTTT AATTGTTTAA CATGTTGGAT TGTCATATGA	60
10	GGTGATGGTA CATTAAAAGG ATTTAATTCA TCTATTTGTG CATATTGATT TATGACATCT	120
	TGATGCATTG AAATAGGGTT GATATCATTT GTTACTACTT TATTAGATTG GTCTTGTGAC	180
	ATACTAATGG TGCCACCAGT ATGAATAACA AGTAGATGTT TCATATATTT CCTCCTATAT	240
15	TTAATTTACC TAATTATGAT AAAATATTAT TCATAAAACG ACAAGGAAGG GAAATGACGC	300
	ATGAAAGCCA TTAATATTGC ATTAGATGGT CCAGCTGCTG CCGGAAAAAG TACAATTGCG	360
	AAACGTGTAG CCAGCGAACT ATCAATGATT TATGTCGATA CAGGAGCAAT GTATCGTGCA	420
20	TTAACATACA AATATTtAAA ATTAAACAAA ACTGAGGACT TTGCAAAACT AGTTGACCAA	480
	ACAACATTAG ATTTAACTTA TAAAGCAGAT AAAGGTCAAT GTGTCATTTT AGATAACGAA	540
	GATGTAACAG ACTTTTTAAG AAATAATGAT GTGACGCAAC ATGTTTCATA CGTTGCATCT	600
25	AAAGAGCCAG TACGTTTCATT CGCCGTTAAA AAACAAAAAG AGTTAGCTGC AGAAAAAGGT	660
	ATCGTAATGG ATGGTCGCGA TATCGGAACT GTAGTGCTAC CAGATGCAGA TTTAAAAGTA	720
30	TATATGATTG CATCAGTTGA AGAGCGAGCA GAAAGAAGAT ATAAAGATAA TCAATTAAGA	780
	GGTATCGAAT CAAATTTTGA AGATTtAAAA CGTGATATTG AAGCTCGTGA TCAATATGAC	840
	ATGAACCGTG AAATATCACC ATTAAGAAAA GCAGATGATG CAGTGACATT AGATACGACm	900
35	GGCmAGTCGA TTGAAGAAGT TACTGACGAn ATTTTAGCGA TGGTGAGTnC AATTnA	956

## (2) INFORMATION FOR SEQ ID NO: 688:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1166 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 688:

45	AAAAGGGAGG AAAGAGAACA GTTAAATATG AATACAAAAT AATTTTGT TT TCGGACAGCA	60
50	GGGGTATTAG ACGCGATTGA CAATGTCTGT TTAATTAAAC GTAATGTTTA TTAAAGCGAT	120
	GAATATTAGG TGAAAAGTTT TTGAATTGTA ATGTAATTGA GGTTTATTGA TTAGACATTT	180
	TATTGAATTG CGTGTTATTA TATAAATGTA AAAATAAGAC GACATGCGCG AACATGTCGT	240

TAATGCGGAA TGGTTTTTTT ATTTTCCGCT AATTGAAATA AAAATGACGT TTTAATATAT 360  
 TATGGGCTAG GTGGTTTGTA AGAAAGGGTT AGTTATTAAT GTTTTATGAA TTAAGGAAAT 420  
 5 TTGAGTTTAA GGTTTAATCA ATTGTGATTT TGTTGATGAA GCGTTTAGTT AGAGTATTTT 480  
 CGCCACCACT AGTTACTCCT TCTCCCACTT TACCCGAGAC TGGAGAAGAg CTATCTGAAG 540  
 AATAAATAGA TACTTTTTTG CCATTTTGTA GTAAACCAAG ACCTTTTAAC TkCTCGGTTA 600  
 10 GAGAATTCCA TGTATTTTAA GCATCTAGCT TTTTGTTAAA GTCAyCGTAG ACATTTTCCT 660  
 TAGTTAAATC AATTTGTTTT AATCCTTTAA AGTCTATAGA TTGTGTTAGA TGGCCTCCAT 720  
 CATCATTTCC AGGAGCAGAA ACGCTGCTAG AATATCCATT GCTTAATAAA TAAGTAACGT 780  
 15 TGATTGTTTC GTACTCGTTA CTAAAATAA TATCAGAATC ATGTAAGaAT CTTTAACTTT 840  
 TTTCCATAAT TGACCATCTG TCATTTTTTC TTCTGCTTTA GCCGTTTTAA CAACTTTATT 900  
 20 TGTATCTAAT CCTAAGTATG AAGAATGTAA GCCTGTTCTT AATGTTGTTA ATACTAAAGC 960  
 ACTTGCTACT aATGTTTTAC CTAAAAattT TGTATTCATT TTTATTGCTC CTTtTTTTAT 1020  
 ATTGTAAACG TTTACAATGA AAATATAATA ATAATTTTTT AAAAGAACAA TTAACTAAAT 1080  
 25 ATCAAAAATG TATTAATCTAT CTATTAATAA AAAAATAGAA TAATTTTTTA ACATAGTTTT 1140  
 GTTGTTTTGA ATTATAAAAA CTAAAG 1166

(2) INFORMATION FOR SEQ ID NO: 689:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1083 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 689:

40 AGCACTGAAG GATGGCTAGT TGTCATAGCA TATGCGGTCA TTGGTATAGT TATAACGAGC 60  
 GTTTCCTTATA TGTTGTCTAT TAAAATTTTT AACAAACAAG AACTAKAATT GTCGATTTTG 120  
 GTGATGATAG TATTTGAAAT AATATTTAGA GCAGGTGATA AATCTTTACG ATTGTCATCT 180  
 45 GTTCTTTTKG GTGTGGAATG AAATGTGGGG GATAAGTATA GGTGACATAT CTATATTGAT 240  
 TTATTTGTTT TGAGGTGGTT ATGTTGTGTG GGAATTATTT CCTTTTAGAT AGCGGGGATT 300  
 AGAGGATATA TGTTATTTAT AAGTATCATT TGATGATTGT ATAGGCTAAC GATTTCCCTCG 360  
 50 GAAATATTTA AAAACCTCGA TCATGTAGCA TAACTGAAGT TTGTCACAAA AGTATAATGT 420  
 GAAGTTCGAC ACTTTTGGaT TCAGTTCAAA TACTTTGACC GAGGTAAATA CTATTTATTC 480

TGATACTGAG ATAATCATTa CATGGTCGTG ACCTTTAAAT AAAAGGCTGA CAATATAAGA 600  
 CATAACGAGT ATACCTAGTG AATATGAAAT ATACTTCGCG TTTGTCAGTT CATTATGGAA 660  
 5 ATAAGGCGTG ATTAACCATA ATCCAATATA GAATATTAAA AACTGATAT ACATCATATT 720  
 AATTTCAAAC AAGTCATTTA GTTTATTGTT ATTACTAAAA ACAATTGCAG CATTAAATCAC 780  
 ACCTAAAGCG ATATTGATTA ATAGATGCGT ATACGATAAA CGGAAACCGA TAGATGTTAA 840  
 10 TTTATGATTA ATATAATTTT CAGTAATGAT CCAATATACA CCGAAAAGAC TAATTAAAAT 900  
 CATAAATTGG AATATATAAA TGTAATAAA ATGATCAATG CTAAATGATG ACGAAGCTAA 960  
 15 ACCAACCAGT ACCTCGCCAr AGwTAtAATT GTTAGTAACG AAAAACGTCT ACTAAATGCA 1020  
 TCATATTAAC AGGTnTAATA CAAGTATTTTc TGAAATGGAA TAAGnCTGTC GCTGCATGAT 1080  
 ACG 1083

(2) INFORMATION FOR SEQ ID NO: 690:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 627 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 690:

30 TTAATCATCT GGATGTATTT AGTATTnAGA ATAATAAnAA AACGATCATG TTGTATtTGA 60  
 GTAGCGATTG GTTTGCGGAA TTAGGCTTTA CTTTCTTTAA TTACCACTAT ACAGCAAAGT 120  
 35 TGATTAAATC ATCCTATAAT TTGAAATGTC TACTATTAAA ATTGACATAT CGATACCTTG 180  
 ATAATCAGCC TCTTAATGAC GCTGATAYTA GAAAATTACA GGATATTATT AAAATCATTG 240  
 CAAAAGAAGC AAGTATGGAT AAAAAGATTG CACAAAATCA ATATCGATAT GCGTATTATG 300  
 40 GTGATTTGCG TGATGAGCTC GAATATATTT ATCAAAATGT AAATCAACGA TTGACATTAA 360  
 AAAGTGTCGC TGATAAATTA TTTGTCTCAA AGTCAAATTT GTCATCACAA TTCCACTTAC 420  
 TTATGGGCAT GGGTTTTTAAA AAATATATTG ATACTTTGAA AATnGGTAAA TCGATTGAAA 480  
 45 TTCTACTTAC TACTGATAGT ACTATTAGCA ACATAAGTGA nCATTTAGGT TTTAGTAGTA 540  
 GCTCCACTTA CTCTAAAATG TTTAAAAGTT ATATGGATAT CACACCGAAT GAATATCGTA 600  
 ATTTATCAAA ATATAATAAn TGTTTAC 627

(2) INFORMATION FOR SEQ ID NO: 691:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 641 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 691:

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TTGAACGTAA TGCTAGCAAA TGACTTTGTG CCATAAATA TTCTTCCCAT TTGATTCTTT	60
CCAAGATGTT CACCTTCCAT ACTTAAAT TAGTAACATT TTCTAATAAT ATAAGATTAA	120
TCACAAAAAA TAAATTTGTC AATTAAATA ATCCATTATG TCGTGAAATA AGATTTCAGT	180
TTATCAAAAG TTTTACTTCC AAAACCTTTT ACTTTTTTCA AATCGTCAAT TTCTTGAAAT	240
GCACCTTGTT GGTGCGATA TTCAACAATT GCATTAGCTT TAGCTTGCCC AACTCCAGGA	300
ACAGACATCA ATTCTGATAC AGATGCCGTA TTTAAATTTA CTTTAGTATT ATTTGTGTTT	360
CCaTTTTTTT CGTGCACT GTTTACTTCA ATTTGTGGTT CAACATTCTT TTGTCCTTTA	420
TGAGGTATGA AAATCATTTT TTGATCTGTT AATTTTTCAG ACAAATTAAT TTGACTTACA	480
TCTGCATCCT CCAATAATTG TGCTTTATCA AGTAAATCAA CTACTCTATC CTTAGATGTC	540
ATTTTATAAA CATTAGGATG TTTAACAGCA CCTTTTACAT CGACATATAC AGGACCCTTA	600
TTTTTGGAAT TATCTCCATC TTTGACCTGG ACATCTTCTA C	641

(2) INFORMATION FOR SEQ ID NO: 692:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 631 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 692:

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TATTAAAGnA CTTGATGAAC CAAATCATAA AAAGCnATAT ATGTTATTTG CAGCTGGCAT	60
TGTGTTnGCA ACTATTTTAC TTATTTTCGGC ACATTTTATAC AGCAGAAAGA GAGGTAACCA	120
AGTTTGAGAA TCATAAAGTA TTTAACCATT TTAGTGATAA GCGTCGTTAT CTTAACCAGC	180
TGTCAATCTT CCAGTTCTCA AGAATCAACT AAATCCGGCG AATTCAGAAT CGTACCAACA	240
ACTGTTGCAT TGACAATGAC ATTGGACAAA TTGGATTTAC CAATTGTCGG CAAACCCACG	300
TCATATAAGA CATTGCCTAA TCGTTATAAA GATGTACCGG AAATTGGTCA ACCAATGGAG	360
CCGAATGTTG AAGCTGTTAA AAAGTTAAAA CCAACACATG TTTTGAGTGT GTCAACGATT	420
AAAGATGAAA TGCAACCATT TTACAAACAA TTAAATATGA AAGGCTACTT TTATGATTTT	480
GATAGTTTAA AAGGGATGCA AAAGTCGATT ACACAATTAG GTGaTCAATT TAATCGTAAA	540



GCAGCTAAAC AAAAGAAACA TCCCAAAGTA T

631

(2) INFORMATION FOR SEQ ID NO: 693:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

15	AATTTAACTA TGTTTTCCAC ATTGTTTCAT GTCACGAAAA GGACAACGCG CGACTATAAG	60
	TATCAACTAT TTCCACAAGT TTTATTGGTG TTTTATTAT TCATCGATAC GCTTCATTTT	120
	CATCTCTCCA ACACAAAAAA GAAGCTAAGC AACTTATGTT GCCTAACTCC TCTATACTAT	180
20	CCATATTTTA CTATTATCCA TATTTCAATTG AATTATCTAA TGTGGCTTC TATTTTTTCA	240
	ATATTTCTAC CGTCAATGAC GTCACATG CGATTTGTTT GTAATTTTTT ATTAAGTTCA	300
	AACGTATAAT AGCCGCCATC TTTCATTATC ACTTTTATCT TACTATCTTT AGGAACTTT	360
25	TTATACAGAT CAAAATTTTG AATTAAATAC TGTCTCAATT TAAAGTCGAG TTCTTTAAGT	420
	GAAATCTCTT CTTTATAAAT GTAGTGTACT CTACCGTACG TAGCAATACC GTCACCTTCA	480
	TCTCTCTTGA TTTGAAATCT TGGTGCGTTT ATATAATCAT AATAAGCGTC TTGATTTTTT	540
30	TTAGTGACAC CACCATATGA AAACACTGTG CCATTACGGT TTTCCGCTTC TTTAACAACA	600
	AATATGTCTA ATCCCGGATT TTTACGTGCT TTAAATCTTT CAATATCTTT ACCAAATATC	660
35	TGTACTCTTG TGAATTTTCT ATTTTATCA AAGATAAGGT AATGCTTGCC ACCTTTGCTA	720
	TAACGATAAC CAGTAACATT TTTAAGTTCC TTAAGTTGCGC CACTATAGTA ATCTCTTAAG	780
	TCAAAGATAT CTTTGTGAC ATTTTCATAT TTTGCTTTAT GTTCACTCGC ATTTACAGTT	840
40	TGATGCAATG ACGTTATTGT TCCTGTTGCT AAAATACCTA ATGCTAAACT TGCTTTGCA	900
	ATTGCTGTCA TTTTCATAGT TGTATGCTCC ATTCGTAATT ATTAGATTG TTCGCTTACG	960
	TCTATTGAAT CATACAGCTT TATTATAGTT AGCGTATTTG ACCTTTCACA TTAAACCATG	1020
45	TTTAATAATC ATTGAATCAT TATTAAGTAA ATTAAGGATC TATAATGTTT GTTAAATAAA	1080
	CTGAnCCCGT TGTGCTTCAC ACCCGnTnGA T	1111

(2) INFORMATION FOR SEQ ID NO: 694:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:

5 TTATGGATGG ATTAAGAGGT CGTGTGAAA AAATCAACGA TAACTCTGTT ATTGTTGACT 60  
 TAACAATTAT GGAAAATTTT AATGACCTTG ATTTACCGGA AAAAAGTGT ATCAATCATA 120  
 AACGATATAA GATTGTTGAA TAAGAAGGTA AGTTATAATG AATAAAATCT CGAAGGCTTT 180  
 10 AACTTGTTTT ATTATAAGTT TCATTATATT TCATCTCATA TTATTTATTA TGTGGGGCGA 240  
 ACACCAAGAA TACTGGTATT TATATACAGG TATAATGCTA ATTGCTGGTA TCAGTTATGT 300  
 ATTTTATCAA AGAGATATTG AATCTAAGCG GTTGCTTACA TCAATTGGTG TTGGTATTAT 360  
 15 TACGGCAATT ATTTTAATTA TGCTTCAACT TTTATKCTCA CTTATAACTT CTAATTTAAG 420  
 TTATAG 426

## (2) INFORMATION FOR SEQ ID NO: 695:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 737 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:

30 AAAAGGGGnG TAAGGTTTAG CTCAAGTACG AGAAGTCTTT GGTGATGAAG CAATTGATGA 60  
 AAATGGTGAG ATGAATCGTC GTTATATGGG TGATCTAGTG TTTAATCATC CAGAAAAACG 120  
 CTTAGAATTA AATGCTATCA TACATCCTAT CGTGCGAGAT ATTATGGAAG AAGAAAAGCA 180  
 35 AGAATATTTA AAACAAGGAT ATAATGTAAT CATGGATATT CCATTATTAT TTGAAAATGA 240  
 ATTGGAAAAT GCAGTAGACG AaGTGTGGGT TGTATACACT TCTGAAAGTA TACAAATGGA 300  
 40 TCGTTTAAATG CAACGTAATA ATTTGTCATT AGAAGATGCG AAAGCACGTG TCTATAGCCA 360  
 AATTTCTATT GATAAAAAAA GCCGAATGGC CGATCATGTT ATCGATAATT TAGGGGATAA 420  
 ACTTGAATTA AAACAAAACC TTGAGAGATT GTTAGAAGAA GAAGGTTATA TTGAAAaGCC 480  
 45 GAATTACGGA GAAGAAGATT AATATTACAC TATAAATAAG TCATTACTTT ACGTACGCGT 540  
 TGATGTATGT AAGTAATGAC TATTTTTTTAT AAAAAAGATA AATAAATCAA CGGAAAACGC 600  
 TTTCAAATTT CATATAATAT GCTATACTAA TTCCATAAAG TATAACACAT AAAGATCAAG 660  
 50 GGGTGCTTTT AATGTCAACG AATATTGCAA TTAATGGTAT GGGTAGAATT GGAAGAATGG 720  
 TATTACGTAT TGCATTA 737

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 696:

AACGATAAGA ACAAAGATA TATTACAAAG CGTTTATTTA AAACGTTATT TATTACGCGC 60  
 GATGATGGCA GGATTTATTA TCGGGATTAT TACGGTCTTC GTATTATCAG TTAAAGCAAC 120  
 ACACGAACCA GATTTACCGC CAGgCATTGT GAATATGGCC AGTGCCATTA CATTGAGCTT 180  
 TCGGTTAGTA CTCATTTTAT TTACAAACTC CGAACTACTA ACCAGTAACT TCATGTACTT 240  
 TACTGTAGGC CTGTATTmTA AAGTAATTAA ACCAACTAGA GTATTGaAAA TATTTTTATT 300  
 ATGCTTTGCA GGAAATATTT TAGGTGCTGC TATTTyATTT AGTTTCATGC GTTTTTCAAA 360  
 TGTAATGACG CCAGATAWgt TAAAyCAGTT ATCAGCAGTT ATAGAGCATA AAACGTTGTC 420  
 TACTGGTTTT GT 432

## (2) INFORMATION FOR SEQ ID NO: 697:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 782 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 697:

CTTTTATACG AAAGTTAAaA TCAAATATAA CATTAAATGTT TGATGGGGAT TTTGCGGGTA 60  
 GTGAmGCAAC ACTTAAAACA GGTCAAAATT TGTTACAGCA AGGGCTAAAT GTATTTGTTA 120  
 TACAATTGCC ATCAGGCATG GATCCGGATG AATACATTGG TAAGTATGGC AACGATGCAT 180  
 TTACTGCTTT TGTAaaaaaAT GACAAAAAGT CATTTCACACA TTATAAAGTG AGTATATTAA 240  
 AAGATGAAAT TGCACATAAT GACCTTTCAT ATGAACGTTA TTTGAAAGAA CTAAGTCATG 300  
 ATATTTTCGCT TATGAAATCA TCGATTTTGC AACAAAAGGC TTAAATGAT GTTGCACCAT 360  
 TTTTCAATGT TAGTCCTGAG CAATTAGCTA ACGAAATACA ATTCAATCAA GCACCAGCCA 420  
 ATTATTATCC AGAAGATGAG TATGGCGGTT ACATTGAACC TGAGCCAATT GGTATGGCAC 480  
 AATTTGACAA TTTGAGCCGT CAAGAAAAAG CGGACnAGCA TTTTTAAAAC ATTTAATGAG 540  
 AGATAAAGAT ACATTTTTAA ATTATTATGA AAGTGTGAT AAGGATAACT TCACAAATCA 600

TATCAGTGAT GCTGTGCAGT ATGTTAATTC AAATGAGTTG AGAGAAACAC TAATTAGCTT 720  
 AGAACAATAT AATTTGAATG ACGAACCATA TGAAAATGAA ATTGATGATT ATGTCAATGT 780  
 5 TA 782

## (2) INFORMATION FOR SEQ ID NO: 698:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 714 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 698:

AAATCATTGG CAAAATATAC GAATTGCATT TAAATCGTCA ATTTACATAT ATTTTTGCGT 60  
 AGTAATCAAT CGTTATCATT GTTATTTATC GTTACATTAT TTCGAGTATC AGTATGTATT 120  
 TCGGGCTTCG TTTGATAACG ACATTTCTTT GTGACATCGC TTCATCAGTG TAACAACAAA 180  
 TACAATGATT TCGTGATGTT AGTTACCCAT TTTATGTGTT GCATAAAATA TGTTGTTATA 240  
 AAACATTTTA AATCATTTTA TATAACAAT CTATATATTT TTGGCATTTC CAAAATATCA 300  
 CTTGTTATAT TAAAAACCGA CAAGACATTT TATCTTATCG GTTGAAATTT GTTATTGTTA 360  
 TTTGTAATGT TTTTAGGTTT CTTTTTAATA TAATATATTT CAGTGAAAAT ACATGATTGA 420  
 TTGTGATTTT ACTGAAACAT GGTTAATTGC GTTGTTGATG AATAACTTTA GCATAAATAT 480  
 AGGAAGTTAT TTTGTACATC GCCATATATA GAAACGAAAT TATAATGACA GCTAGTACGT 540  
 AACTTGTTAA AAATATATGA TGGTTATTAA TACCTATCAT ATTTAGTAAC GTATATACAA 600  
 TGTTACTAGA AATTAATGTG TGAATCAGTG CTACTGTTAT TGGTATtGCG AACAGAAAG 660  
 TCATTTGATT TCGTGTTATC TTTGCTATTC TTCCATTATC TAAACCAAGT TTTT 714

## (2) INFORMATION FOR SEQ ID NO: 699:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699:

ACTGAGAGCA ATAATTTAGT AACTTCTACT CAAGGAATTA TTAAAGAAGC ATTGCATAAA 60  
 TTGGGATTTG nnTTTAATTA AAGAACCCTT AAGAATGTTA CAAGTGCCTA TCCCTGTACG 120

TGGACCAACA AAAGGGGGCG TCGTTTCCA CCCAGATGTT GATGAAGAAG AAGTAAAAGC 240  
 ATTATCAATG TGGATGACTT TGAAATGTGG CATTGTGAAA CTTACCATAC GGTGGTGGTT 300  
 5 AAGGGTGGTG ATCGTTTGTG GATCCACGTC AAAGAGCAT TCCATGAAGT TGGAACGTTT 360  
 A 361

## (2) INFORMATION FOR SEQ ID NO: 700:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 943 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700:

GTCCTTAATT GGTATCCACC TTTAGCACCG CGTACACTTC GAATTAACCC CGCATTTCCTT 60  
 AAAGGACCTA CAAGCTGTTT TAAATATAAA TCACTCAAAT TATTTTCTTC AGCAATTGAC 120  
 TTTAATGATA TACATCCTTG CCCCTCTTTT TTAGCAAGAG AAATCATCAA TGTAAGTCCA 180  
 25 TATCTCCCTT TAGTAGAAAT TTTCAATTGTA TAACCTCACT TAATTCGAAT ATTGATATTC 240  
 CCATTTTAGC ATTTTTTGAG TTAAGATAGT ATAAGAAAGG TGTGACAAAT GTGAGTACAG 300  
 AACCATTAGC ATCGAGAATG CGCCCCAAAA ATATAGATGA AATCATTTCC CAACAACATT 360  
 30 TAGTTGGACC AAGAGGCATT ATCAGAAGAA TGGTTGATAC AAAAAAATTA ACTTCAATGA 420  
 TTTTATATGG TCCACCTGGT ATAGGCAAAA CAAGTATTGC CAAAGCAATT TCGGGCAGTA 480  
 CGCAATATAA ATTCAGACAA TTGAATGCTG TAACTAACAC TAAAAAAGAT ATGCAACTTG 540  
 35 TTGTTGAAGA AGCTAAAATG TCTGGTCAAG TTATCTTGTT ATTAGATGAA ATACATCGAC 600  
 TAGATAAAGC TAAACAAGAC TTTTATTAC CTCATTAGA AAATGGCAAA ATCGTCTTGA 660  
 40 TCGGTGCTAC AACTTCAAAT CCTTATCATG CTATCAATCC AGCGATTTCG TCAAGAGCGC 720  
 AAATTTTCGA GTTATATCCT TTAAATGACG AAGATGTGCG CCAAGCGTTA ACTCGTGCAA 780  
 TAGAAGATGA TGAGAATGGT TTGAAACAT ATCAACCCAA AATTGATGAA GATGCCATGA 840  
 45 CCTACTTTTC TACACAAAGC CAAGGTGATG TTCGTAGTGC GTTAAATGCA TTGGAATTAG 900  
 CTGTATTAAG CGCAGATAAT GACAAAGACG GTTATCGACA TGT 943

## (2) INFORMATION FOR SEQ ID NO: 701:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 701:

5 CATTAAGTGA AGTTGTTGAT ACACCCATGC ATCAAGTCAA TTGTTCTGTT GATTTAGATA 60  
 CAGAAAGCTT ATTAGGCTTT AAAACAATTA AAACAAATGC GGAAGGTCAA CAAGAAATTG 120  
 TCTTTGTAGA TGGTCCAGTT ATTAAAGCTA TGAAAGAGGG GCATATTTTA TATATTGATG 180  
 10 AAATAAATAT GGCTAAACCT GAAACATTGC CTGTATTAAA TGGGGTCTTA GATTATCGTC 240  
 GTCAAATTAC GAATCCATAC ACTGGTGAAG TAATCAAAGC TGTACCAGGA TTAAACGTTA 300  
 TAGCAGCGAT AAATGAAGGT TATGTTGGtA CTTTGCCAAT GAATGAAGCA CTAAAAAaT 360  
 15 CGCyTTGTTG TtATTCACGT kGATTATaTT GATGGGGaCA TTTAAAAAAT GTGAnTAAGG 420  
 AGCAAGGTTT ATTACAAGAT GTTAA 445

## (2) INFORMATION FOR SEQ ID NO: 702:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 752 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 702:

30 TGCAAGATAA ACAAATTTGT CATTGTTTTG GTTGTA AAAA AGGTGGCAAT GTTTTTCAAT 60  
 TTA CTCAAGA AATTAAAGAC ATATCATTG TTGAAGCGGT TAAAGAATTA GGTGATAGas 120  
 TTAATGTTGC TGTAGATATT GAGGCAACAC AATCTAACTC AAATGTTCAA ATTGCTTckG 180  
 35 AyGATTTACA AATGATTGAA ATGCATGAGT TAATACAAGA ATTTTATTAT TACGCTTTAA 240  
 CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG 300  
 CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTCATGATT 360  
 40 TTCTTCAAAA AAAGGGTTAC GATATTGAAT TAGCATATGA AGCCGGATTA TTATCACGTA 420  
 ACGAAGAAAA TTTCAGTTAT TACGATAGAT TTCGAAATCG TATTATGTTT CCTTTGAAAA 480  
 ATGCGCAAGG AAGAATTGTT GGATATTCAG GTCGAACATA TACCGGTCAA GAACCAAAAT 540  
 45 ACTTAAATAG TCCTGAAACA CCTATCTTTC AAAAAAGAAA GTTGTTATAC AACTTAGATA 600  
 AAGCGCGTAA ATCAATTAGA AAATTAGATG AAATCGTaTT ACTAGAAGGT TTTATGGATG 660  
 TTATAAAATC TGATACTGCT GGCTTGAAAA AC GTTGTGTC AACAAATGGGT ACACAGTTGT 720  
 50 CAGATGAACA TATTACTTTT ATACGAAAGT TA 752

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 703:

```

10 nCGTTTTTGT nAAACHGCTT ATATGTATAA CTTTTCCCAA TTTATCATAA GTTTTGATAG      60
   AAGGAGTTGG ATCGCTAAAG AAAATATCTC TAAAGATATC ATCTTCAATG ATAGGAATAT      120
   TATGTCTTTC GCTATAAGTA ATTATATTTT TCTTTTGCTC ATTCGTTAAA GAACGACCTG      180
15 TCGGGTTATT AAACCTAGGT TCTATATAAA TCGCTTTATT TTTAAAATTA ATAAATCTAT      240
   CAATGATGGT ATCAATTTCA TTAATTTGAT TATAAGGAAC ATCAATATGT CTAAAATTCA      300
   ATTGCTCAAA AACATTTGTA GAGTGAATAT ATGATGGTGT ATTCGAAATT ATTATGGCAT      360
20 CTTGACCTAA AAACCCAATA GATAAAAGTT GAATGGCATG TAAAGCGCCT GAAGTGATCA      420
   TTACATTTTC TCTACCTACA TTTATACCTT GCTTTGACAT TCGTTCAACG ATAATATCTC      480
   TTAACCTGAT ATAACCATAG CCATTATTAT AACCAAAGA TAAGTCTTCA ATATGACTGG      540
   CTGTATTAGA CATGGCTTTT TTCAATTGAA TATGTGGCAT TAACGATATA CCCAATTCAC      600
   CTTTACTTAT ATGTATATAC GAATCATCTG TCTCAATTTT ATTAATTAAT TGCACCGTAT      660
25 ACTGACTTCT TTGTTGAGAG GACCATAACA TCATTTTCTA CCACTTATTT GTAATATGTG      720
   CTTCAATTCAA ATAGTCATTA ACATATGKTC CACTACCTAC TTTAGTATAG ATAAATCCTT      780
   CAGCTTCTAA TAACTCAATA CTTTTAATAA TCGTTACTCT ATTTACGTTG      830

```

## (2) INFORMATION FOR SEQ ID NO: 704:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 704:

```

45 AGTGGTGTTG GAAAAGCTAT TATGAAATTA TTACGTGAAC AACAAGTTTA ATAAAAAAG      60
   AGGGGTCAAA TATGAAAGGA TTAATTATTA TTGGCAGTGC ACAAGTGAAT TCACATACAA      120
50 GTGCACTAGC AAGATACTTA ACTGAGCATT TAAAAACACA TGATATTGAA GCGGAAATAT      180
   TCGATTTAGC AGAAAAACCG TTAAATCAAT TAGATTTTTC AGGAACAACA CCGTCTATTG      240

```

TATTAGGAAC GCCAACTAT CATGGTTCAT ATTCTGGAAT ATTGAAAAAT GCATTAGATC 360  
 ATCTAAATAT GGATTATTTT AAAATGAAAC CTGTAGGCTT AATAGGAAAT AGTGGTGGTA 420  
 5 TTGTTAGTTC AGAGCCATTG TCACATTTAA GAGTAATCGT CAGAAGTTTA CTAGGCATTG 480  
 CTGTACCAAC TCAAATAGCA ACACATGATT CTGATTTTGC TAAAAATGAA GATGGTTCAT 540  
 ATTACTTAAA TGATAGTGAA TTCCAATTAC GAGCAAGATT ATTTGTCGAT CAAATTGTAT 600  
 10 CTTTGTGAA TAATAGTCCA TATGAACATT TAAAATAATA TTAAnAAATA TGTAAATnT 659

(2) INFORMATION FOR SEQ ID NO: 705:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 705:

ncaccatata GTAAGTGGCA CCAACTACAT TACCGTCTTT TAAAAAGATT TTTTATAGT 60  
 25 TATTATCAAC ACTATTAAAT ATTTCAATAC CTTTAATTTT TGCATTTTCT ACAATTTGAC 120  
 CAGCACTATA CAAGTCACAC CCAGAACTT TTAATGACGT AAATGTTGTT GATCCCTTGT 180  
 ATCCGTTCGT TTCTTTATTT GTTAAATGAT CAGCTAATAC TTTACCTTGT TCATATAGTG 240  
 30 GTGCAACGAG TCCATAAACT TTGCCGTTAT GTCTGCACAT TCACCAACTG CATATACATT 300  
 GCTATCACTT GTTTGCATCA CATCATTGAC AACAATACCA CGATTACATC TAGACCTGAT 360  
 CTTGGCACTC CTGGGAAGGC GGAACCACTG CATACAACTA 400

(2) INFORMATION FOR SEQ ID NO: 706:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 706:

TTAAAAATAC AGCTACAGGT AATTTTAATG ATTTTTCATC AATATCAAAT TTGGGATTAT 60  
 GGTGTGGCGC TGTAATACCT TTAACCACTC AGAAAGAATG CACCTGGTCG TACTTTCAAA 120  
 50 TAATGTGAAA AATCTTCTCC AATCATCATT AAATCTGATT CATTAAAGCG TACATGTAAG 180  
 TCATTGTGTG CTCTTTAAT AACTTGGATA TGCTTTCTCG TTTATTATGG ACAGGCAAAT 240



GCTTAATCCA TTTTGTCCAT ACATGATTCT GTATATCTGA AATCGAAAAGT TCTnACTGTA 360  
 CCTTTACAAA ATGCCTTGnn 380

(2) INFORMATION FOR SEQ ID NO: 707:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:

CAnAAAGGAT CAAAGTGATC GGTATAGTGA TAATTAGCTC CAAAGAAAGA ATATTCTAAA 60  
 TCAAATCCAT ACCAAGCAGA AAGTATTAGC GAATATCAAT TTAAATGGTA CCGATTCAAA 120  
 TAAAGAAACA CGACATATAG AATTTTTACT TGATGATTTT AGTGAATCAT ATGAACCAGG 180  
 AGATTGTATA GTAGCATTAC CGCAAAACGA CCCTGAATTG GTTGAAAAAC TAATATCCAT 240  
 GTTAGGTTGG GATCCGCAAT CTCCGGTGCC AATTAATGAT CATGGTGATA CAGTTCCTAT 300  
 TGTGAAGCA CTAACATCAC ATTTTGAATT TACTAAATTA ACATTGCCAT TATTGAAAAA 360  
 TGCAGATATC TATTTTGACA ATGAAGAATT ATCTGAnCGT 400

(2) INFORMATION FOR SEQ ID NO: 708:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 447 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:

TAATGCTGGT ACGGGTCATG CAGCATTATG TGAGTTGAAC TACACAGTTT TACAACCTGA 60  
 TGGTTCTATC GACATCGAAA AAGCGAAAGT GATTAACGAA GAGTTTGAGA TTTCAAAACA 120  
 ATTCTGGGGT CACTTAGTGA AAAGCGGTAG CATCGAGAAC CCAAGAGAAT TTATCAATCC 180  
 ATTACCACAC ATCAGTTATG TTAGAGGTAA AAACAATGTT AAATTCTTAA AAGATCGTTA 240  
 CGAAGCGATG AAAGCTTTCC CTATGTTCTGA TAATATCGAA TATACTGAAG ACATCGAAGT 300  
 AATGAAAAAA TGGATTCCAT TGATGATGAA AGGCCGTGAA GATAACCCTG GTATCATGGc 360  
 GGCAAGTAAA ATTGACGArG GTmCAGATGt AAmCTyCGGT GAATTAACAC GTAAAATGGC 420  
 TAAAAGCATT GAAGCACATC CAAATGC 447

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 709:

10 GTGTCTACCT GTTTTTGTTG TTCAATTGTT AACTTTTCTT TTTGAATAGT AGTATTTCGAT 60  
 AATTCTTTAT CGCTTATAAA ATCATCTAGT GGATGGCTTT CTTTGAAACT TTTATTTTCA 120  
 15 GTCATCAATC ATCTCTCCAA TAGTTGCTAT TTTACATCAA TCTTGATGAT GTTTTTGATG 180  
 TAACTTATTT AATTCCATTT CAATATCTAA ACGTTCATAA TCATCTTCGT TGAGACGCTT 240  
 TAAATCAGCG ATTAATGTTT GTTTGACCTC ATCCAAAGTA ATTCTGTGTTT GTTCTAACTT 300  
 20 TTGCTGTTCA TTAATTGATT TTTTGGGCAT TTTTGCTAGA CGTGTATATG CATCAACCAA 360  
 ATTTAAAGCA TTATCAATAT GAGAATAAAA AAAGCCTTCA ACTTTATAAA ATGATGCAGG 420  
 TCTCTGTCTA ACTGTCGTAT AAATAGAACG TGAAATTTGG TATATATCAT TAATCTGCCT 480  
 25 AAAATCTTTA ATTGATCTTA TATTGACATA CGTTTTTAAA ATACCTCTAA GTTTTTGGTG 540  
 TGTATGATTT AACTGATTTT GAATATAGCG ATAGTCTTTT CTAGTCAAAC CAATTTCTGT 600  
 TAAATATTTG CGTGAAGTGA GTTTTTGTAT CGGTAGGTAT GTCATTAAAA AGCCAACAAT 660  
 30 ACCAATAGAC ATATCAATTA AAAAAGATAC ATCAAGTGCA ATCATCCCAA ATATGCTTGT 720  
 TAAAAACGCT ACAGGAATTC CCACTAACAC CCCAAATATA TGAGAAATAT TATATCTCAC 780  
 TGTCATCTTC CTTTATTTAG CATTTTATAT TGATCGAAAA TCCGATAATT TTTGATTTAG 840  
 35 TTCTAACTCT TCAAGTTGAT GGCTTGTTAC ATTTGATGCT GGTGAGGCAC CTTCAATTAC 900  
 ACCTTGAATA AATCTCTCTA TATCTGCGTC ATCCCCTTGT GCATATATCT CTACATAGTC 960  
 40 ATCTACATTT TGAACAGTAC CGACAATGTT ATAGTTCATT GCAATGCGTT GTGTAAAATA 1020  
 TCTAAATCCG ACGCCTTGAA CGCGTCCGAA TACTTGTAAG TGTATATGtC TCaTTTTTAC 1080  
 CACCTCATAA TGTTATTATA CGTAGTTTTA CTAAAAAAA CTAATAATTA CTATAGTTAC 1140  
 45 TACTTTGTTT GTTTCAAGTC GTCAAACCTG ATTTTCAGAG GATAAAGGTA TAAAAATAAG 1200  
 TATAGAGTTT TTGAAGTATG GAAGGGGTCT TTAATAATGT GGACAGTTAC CAAAATTAGA 1260  
 GCCGATTATG AGGGATGGTG GTTATTCAGT GACTGGCCAG AAAACATTGT TGAAAAATAT 1320  
 50 CAATATCAAG ATTTTGATGA CATGTTTAAG CACTATCAAC AATTGATTAA TCAATGTAA 1380  
 GTTCAGTTCG ATAACATATG CACAGGCAAA TATAATATTT ATGCATTTTA TAATAATTGT 1440

## (2) INFORMATION FOR SEQ ID NO: 710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 710:

GCTGnAAAAT ATGTTAGAAG CAGATGCATG GGCAAAGCTG GGGTCCTTAT TTATTGTCAG 60  
 GTAAAGATGT CTTCAATTCA ACTATTGGAA TATATGGTAT GGGAGATATT GGTAAGCTT 120  
 TTGCAAGAAG GTTGCAAGGG TTTAATACTA ATATTCTTTA TCATAATCGA TCAAGACATA 180  
 AAGATGCAGA GCGGACTTT AATGCAACAT ATGTTTCTTT TGAAACGTTG TTAGCAGAAA 240  
 GTGATTTTAT CATCTGTACA GCGCCACTTA CAAAAGAAAC ACATCATAAA TTTAATGCTG 300  
 AAGCATTTGA ACAAATGAAA AATGATGCAA TTTTATTAA TATCGGTAGA GGACAAATTG 360  
 TAGATGAAAC AGCATTAAATC GATGCACTAG ACAATAAAGA AATTTTAGCA TGTGGTTTAG 420  
 ATGTATTAGC AAATGaACCG ATTGATCaTA CACATCCATT aATGGGaCGT GaTAATGtTC 480  
 TGaTTaCACC aCACATTGGG TAGGCGCATT CAGTTAACh 519

## (2) INFORMATION FOR SEQ ID NO: 711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 711:

CTATTACAGG TGGCGAACCA ATGTTTTCTA AAAAGTCTAT TAGAAATGTT GTTAAACCTC 60  
 TATTAAAGTA TGCACATCAT CGAGGTATAT ATACACAAAT GAATTCAAAC CTAACATTGC 120  
 CTCAAGATCG TTATTTAGAT ATTGCTGAAT ATATCGATGT TATGCATATC TCACACAACT 180  
 GGGGAACAAC TGATGAATTC GCAAATGTTG GCTTTGGCGC AATGAAGAAG CAACCACCGT 240  
 TAAAAGCTAA GTTAAATTA TATGAACAAA TGATTTGCGA TGCACGTACA TTATCAGAAC 300  
 AAGGAATGTT TGTATCTGCG GAAACAATGC TCAATCAAAG TACGCTACCA CATTTACGAA 360  
 AAATACATCA AGAAGTCGTT CATGATATGA AATGTAGCAG ACACGAGATT CACCCTATGT 420  
 ATCCAGCTGA CTTTGCAAGT CAATTAAATG TGTAACTCT AGCGGAAATG AAAAAGACAA 480

TGTTCCTCATG CTTAAAGGAT GATGAAGATC AAAAGTTACT ATCACGTTTA AGAAATGCTA 600  
 AAAATGTAAC GACTAGAAAT GACCCGGATG GCCGTAGTCG TTAAATGTC AATGTATTTA 660  
 5 CAGGTAATGT AATCGTAACT GATTTCGGAG ATGAAACAGG TACAATTTTCG AATATACAAA 720  
 AAGATAAATT AACAGATGTA TTTGATAAAT GGTATCCTC TGATCTTGCT AAATCATTAA 780  
 ATTGTCATTG TTCCGAGTTT AGTTGTTTAG GGCCAAATGT TCTTGTTAAA AATATGTACT 840  
 10 ATCCGAATAT GGATTTTAAA GATAATGAGC GTCATATGCA CAAACAACCA CAAATTATAC 900  
 AATTTTAAAA ACTCTTAATT ATGCGGAGAA GCACTTTATC GATAAGTAGT CTCCGCATAT 960  
 TTTAATGCTA TTATAAATA AAAACAATT AATTGCTGGC AGTACTCTAC TTAAATAATA 1020  
 15 AAGGGCATT T AATAGGACTA ATAGTCTATA ATAAAAGGGG TAAATTTTAA CTAAAAGCAT 1080  
 AAACGTGCAT AATCAAAAAG ACAGATTGTA GGTGGAATAT TCGAaCATAA CAGTTCAATT 1140  
 20 CATCCTTAAC AATCTGTCTT TATATTTTTA GTCTCTAATA TGTTCGACTT GAGCTAAATA 1200  
 TTCAATTGTT gTTTACTTtC AaTGCGaCGt GCTTtCtC GTtCAaCaCG TgwGGTGCTG 1260  
 TATCATAAAA CCATTTTCA ACATCATCTT CTGGATATAC ACCAGGTACA TGTTTAGGTT 1320  
 25 GCCTTCATCA TCTAACGCAA CAAATGTAA 1349

(2) INFORMATION FOR SEQ ID NO: 712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 712:

GAAATTAAAA AAGCAATTGG ACAAGATGCA ACAGTGTCAT TGTTTGATGA ATTTGATAAA 60  
 AAATTATACA CTTACGGCGA TAACTGGGGT CGTGGTGGAG AAGTATTATA TCAAGCATTT 120  
 40 GGTTTGAAAA TGCAACCAGA ACAACAAAAG TTAAGTGCCA AAAnCAGGTn GGCCTGAATG 180  
 GAACCAGGAG GAAnTTGAAA ATATGCTGGG GATTACATTG TGAGTACAAG TGAAGGTAAA 240  
 45 CCTACACCAG GATACGAATC AACAAACATG TGGAAGAATT TGAAAGCTAC TAAAGAAGGA 300  
 CATATTGTTA AAGTTGATGC TGGTACATAC TGGTACAACG TCCTTATACA TTAGATTTCa 360  
 TCGGTAAAGA TTAAAA 377

(2) INFORMATION FOR SEQ ID NO: 713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 713:

AATGAAnCGA AAAATGACTA TAAAAAGTTT AAAGTGTTTT CACTTATTTT AACACTTGTC 60  
 10 ATTGTCATTT TAGCAATTAT AAGATTTGTT CATAAAATGA TGTAATTAGA GTGAGACATT 120  
 GTTTTATGTC TCAGGATCCA GTTATTCATT ATATCTACAA TATTTACGAT TATATAAATA 180  
 ACCCGAGATT TTAGTATGAT TCATTtCACT AAAATCTCGG GTTTCTATTT GATAATTTTT 240  
 15 AATGGGATAT GGCATGTATA CGTTCTTGCC TTTTATCTCA TTTCCAATGA TTAATCTGGA 300  
 TATTGTTCTA AAAATGCTTT CGTTCTTTA TTAAGTGTTT TAAAAATCAAT ACCTTGTTGC 360  
 ATCGCTGCAA AGACACATCC ACAATAACAC TGCCTAAAGA TATTATAGTC ATTACACATT 420  
 20 TCTATGGaAC GCTCATAACC TTTACTTTTC yTAAATCAC TTGGcAAATA GTTCACaTCG 480  
 TATATTTTTT GGACATCCAT ACCAAGTTCA TTGATTAATT GTGCGTTC 528

25

(2) INFORMATION FOR SEQ ID NO: 714:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 731 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

35 TTTAATGGCA TGAAGTCACA GTATATAAAG AATCTGGTGT GACAATCAGT ATGACTAAGT 60  
 ATATAAAAAA AGAGCAGGTG cGAAATAATG GCGAAAGAGT CGAAATCAGC TAATGAAATT 120  
 TCACCTGAGC AAATTAACCA ATGGATTAAA GAACACCAAG AAAATAAGAA TACAGATGCA 180  
 40 CAGGATAAGT TAGTTAAACA TTACCAAAAA CTAATTGAGT CATTGGCATA TAAATATTCT 240  
 AAAGGACAAT CACATCACGA AGATTTAGTT CAAGTTGGTA TGGTTGGTTT AATAGGTGCC 300  
 ATAAATAGAT TCGATATGTC CTTTGAACGG AAGTTTGAAG CCTTTTtagT ACCTACTGTA 360  
 45 ATCGGTGAAA TCAAAAGATA TCTACGAGAT AAAACTTGGA GTGTACATGT TCCGAGACGT 420  
 ATTAAAGAAA TTGGGCCAAG AATCAAAAAA GTGAGCGATG AACTAACCGC TGaATTaGaG 480  
 cGTTcACyTT CTATcAGTGA AATAGCTGAT CGATTAGAAG TCTCAGAAGA AGAAGTGTTA 540  
 50 GAAGCAATGG AAATGGGACA AAGTTATAAT GCGTTAAGTG TTGATCATTc CATTGAAGCT 600  
 GATAAAGATG GTTCAACTGT TACGCTATTA GATATTATGG GGCAACAAGA TGACcTTAT 660

55

CGAGAAATCA T

731

## (2) INFORMATION FOR SEQ ID NO: 715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 715:

```

TTTTIAGrGGa AAGCGaATTA GtCaTATwCg CaGCAGATwG aATGATTGaA AAmGaAATTG      60
aTTCGATTCC AATTGTAAGA AAAAAAGATA ATCAAAAGTA TGAAGTAATT GGAAGAATTT      120
CCAAAACAAC AATAGCTAAG TTATTAGTAG CATTATATAA AGAATAGGTG AGAAGTAATG      180
GAAAAAATTA AAATTATCGT AGCTTCAGAT TCTATAGGTG AAACGGCAGA GTTAGTTGCT      240
AGGGCAGGTA TTTCACAATT CAATCCTAAG CAATGTAAAA ATGAATTATT AAGATATCCA      300
TATATTGAAT CTTTGAAGA TGTTGATGAA GTGATTCAAG TTGCAAAGA TACAAATGCT      360
ATCATTGTTT ATACACTTAT TAAACCTGAA ATGAAGCAAT ATATGAGTGA GAAAGTAGCA      420
GAATTCCAAT TGAAGTCTGT CGATATCATG GGGCCATTAA TGGATTTATT ATCTGCTTCG      480
GTTGAAGAAA AACCTTATAA TGAGCCAGGT ATCGTTCATA GATTAGATGA TGCATATTTTC      540
AAGAAAATTG ATGCGATAGA GTTTGAGTTT AAATATGATG ATGGTAAAGA TCCTAAAGGA      600
TTACCTAAAG CTGATATTGT TTTACTTGGT ATTTGAGAAA CTTCAAAGAC ACCATTATCT      660
CAGTATTTAG CGCATAAGAG TTACAAAGTT ATGAATGTAC CGATTGTACC AGAAaGTGAC      720
ACCGCCAGAT GGCTTATATg GATATTAATC CAAAGAAATG TATCGCACTT AAAATAAGTG      780
AAGAnAAATT AAATCGCATT AGAnAAGAGC GACTAAACA ATTAnGACTA      830

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## (2) INFORMATION FOR SEQ ID NO: 716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 716:

```

nGAAGAACAA GTTTAnCATC TAAATGCCCG TTAAAACTA CAACTACTTG ACGATGTTAA      60
ATCAGTGTTT AAnTCTCAA TGACGCAAAA TAGTGATTTT AATGAAGAAA AGAAAGTGTC      120

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AGAACGTATA AAAAAATACT TTAATAAGCA ACTCACTGAG CAAATTGCAC CAATCGTTCA 240  
 ACAATTAGCA GATTTACATG TCATTATTAA TCCTCAGTTT AACTTTGAAT CAGCTAATAT 300  
 5 AGAGCAACCA TTATTGCACA TCGATTTCOA CGATATGCTA AATGCATTGC CTAAACAATT 360  
 AACAAAACGT AAAATTTTGA ATCCAAATGG GCAAAGAGAT ATACATGAAT CAATTTGTCA 420  
 AAGTACGTTA GGATTATTAC AACCACAAAT GGGATTATTG AGGCAACAGC TTGAATTATA 480  
 10 TGTAAAGCAA ATGGCTGTAG AAGCTGAATC GCAATTTGAA AGTTTTGAAG CTAATATTCA 540  
 AACGCAAATA AACGATTTAT TAGCATTTGA TTTAGATACA ACACCTTATCA ATCAATTGAA 600  
 AGATAAACAT CAACAACCTGA AAACCTATTTT ATATTAAGAA AGAAGGAACG TTTTAAATGC 660  
 15 CTAATAAAAT ATTACTTGTA GATGGTATGG CGCTATTATT TAGACATTTT TATGCTACAA 720  
 GTCTTCATAA ACAATTTTATG TACAATTCAC AAGGTGAACC TACAAATGGA ATACAAGGAT 780  
 TTGTGCGTCA TATCTTTTTCG GCAATACATG AAATACGCCC TACACATGTA GCTGTATGTT 840  
 20 GGGATATGGG ACAATCAACT TTTAGAAAATG ATATGTTTGA tGGTTATAAG CAAAACCGTT 900  
 CTGCACCACC AGAAGAATTG ATACCACAAT TTGATTATGT TAAAGAAATT TCAGAGCAAT 960  
 25 TTGGCTTTGT AAATATTGGC GTTAAAAACT ATGAAGCGGA TGATGTTATA GGTACATTAG 1020  
 CACAACAATA TTCAACTGAT AACGATGTCT ATATTATTAC GGGCGACAAA GATTTACTGC 1080  
 AATGTATTAA TGACAATGTT GAAGTTGGCT AATTAAAAAA GGTTTAAACAT TTATAATAGA 1140  
 30 TATnCATTTAC ATCGTTTn 1159

(2) INFORMATION FOR SEQ ID NO: 717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:

GATTTAATCA ATGCAGTTGC AGAGCAAGCT GATTTAACTA AAAAGAAGC TGGTTCAGCA 60  
 GTAGATGCTG TATTCGAATC AATCCAAAAC TCACTTGCTA AAGGTGAAAA AGTACAATTA 120  
 45 ATTGGTTTCG GTAACCTTGA GGTACGTGAA CGTGCTGCAC GTAAAGGTCG TAACCCTCAA 180  
 ACTGGTAAAG AAATTGATAT CCCAGCAAGT AAAGTTCCAG CATTCAAAGC TGGTAAAGCA 240  
 50 TTAAAAGATG CTGTAAAATA ATTTTACTTA AAAAGCCCTG AATAAGGGCT TTTTATTTTG 300  
 CTTTAAATAC TTACAACCTG TACATAAATT GTAATGTTCT TCTAAGTTTT TAATCTTTGG 360

AACTACAAAA TATACATATG aATATTGaGa TTAATTGTTA GCGTTGaATT TACTTAAAAG 480  
 GTAACCATGT CTACTATAGT ATTTTACGTT ATTTAAAAAG ATGAATAATG TAAATGAAGT 540  
 5 AAAGGTTATT ATGAGAATTA CAAAAGCTAC ATAA 574

## (2) INFORMATION FOR SEQ ID NO: 718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:

AAGaTATTGA AAmTGMaATG GaGCACGCCC TTATTTGATA GAAGTAAAAG ACATTTAATT 60  
 CTTACCGATG CAGGTCAAAT TTTTATGAG AAAAGTAAAG AAATTGTtGC ACTGTATGAT 120  
 TATTTACCAT CTGAAATGGA ACGCTTGAAT GGACTGGAAA CAGGACATAT AACATGGGC 180  
 ATGTCGGCAG TCATGAATAT GAAGATTCTT ATCAATATTC TTGGTGCATT CCATCAACAA 240  
 TATCCAAATG TTACATATAA TTTGATAGAA AATGGCGGTA AAACAATTGA ACAGCAAATT 300  
 ATCAATGATG AAGTAGATAT AGGCGTGACC ACTTTGCCAG TCGATCATCA TATTTTCGAT 360  
 TATACTACCC TAGATAAGGA AGATTTGCGA CTTATCGTGA GCAGAGAGCA TCGACTCGCA 420  
 30 AAATATGAAA CTGTAAACT CGAAGATTTA GCAGGTGAAG ACTTCATTTT ATTTAATAAA 480  
 GACTTTTACT TGA 493

## (2) INFORMATION FOR SEQ ID NO: 719:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:

GCATTGCCAA AACAATACGT TTATATTATT GAGGAACTAC TGTATAAAAAG TAATGAATAT 60  
 CAAAATAAAA AATCATATTA CGAAACACTT GTTAACCAAG TAATTGAACT TAAACAGGCA 120  
 GATGATTTAA TTATTGGACT CGCTTATTCC GTACAACGCT TAGTCGTCGA TCATTTACAC 180  
 50 GTTGTCCGTG ATATTTATGA TCGTGGACCA CAACCAGATA AAATTATGGA TACTGTGATT 240  
 AATTATCATT CCCTAGATAT TCAATGGGGT AATCATGATG TGCTTTGGGT TGGAGCCTAT 300



GATATTATCG AAGACGCTTA TGGCATTAAAT TTAAGACCAC TGCTTACTTT AGCTGAAAAA 420  
TACTATGACG CAGATAATCC TGCTTTTAAAG CCTAAAAAAA GACCTGACAA ACACGAACGT 480  
5 TTAACTCAAC GTGAAGAAAG TCAAATTACT AAAATTTCATC AAGCTATTGC GATGATTCAA 540  
TTCAAGTTAG AAATACCAAT TATTAAACGT CGTCCAAATT TCGAAATGGA AGAACGTCTT 600  
GTGCTTGAAA AGGTTAATTA TGATACAAAT GAAATTACAG TTTATGGTAA TACATACCCA 660  
10 TTGAAAGACA CATGTTTCCA AACTGTCAAT CGTGATAATC CAGCAGAATT ACTACCTGAA 720  
GAAGAAGAAG TCATGAATAA ACTATTATTG TCATTCCAAC AATCTGAAAA ATTACGTCGT 780  
CATATGTCTT TCTTGATGCG TAAAGGCTCT CTTTACTTAC CATATAATGG CAATTTACTC 840  
ATTCAATGGT GTATTCCAGT TGATGAAAAT GGTGAGATGG AATCATTGTA AATTGATGGT 900  
CATACTTACA GCGGCCAAGA ATTATTAGAT GTGTTTGAGT ATCATGTCCG TAAATCATT 960  
20 GATGAAAAAG AAAATACTGA TGACTTATCG ACGGATTTAG TTTGGTATTT ATGGACTGGG 1020  
AAATATTCGT CACTATTTGG TAAACGTGCC ATGACTACGT TTGAGCGATA CTTTATTGCA 1080  
GATAAAGCTT CTCATAAAGA AGAAAAGAAT CCGTACTATC aTCTTCGTGA AGATGTGaAT 1140  
25 ATGGkTCGTA AAATGCTCaG TGaTTTCGGA TTAAATCCAG ATGAAGGACG CATTATTAAT 1200  
GGTCACACAC CAGTGAAAGA AATCAATGGC GAGATCCTAT CAAGGCTGAT GGAAAGA 1257

(2) INFORMATION FOR SEQ ID NO: 720:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 720:

40 TGAGCACATG ACAGTGGCTG AAAACATTAA ATTTTTTAAA TCACTTTGTA AAAATCCAAT 60  
TAACGATACA ACTATCAACG AATATTTACA GCAATTAAAC TTTGATGATA CGTCTGCCAA 120  
AGTATCTACA TTGTCCGGTG GGAATAAACG TAAAATTAAT ATATTAGTAG GTTTACTAGG 180  
45 TCAACCTCGA ATTCTCATTT TAGATGAACC GACAGTTGGT ATTGATTTAA AATCTAGACA 240  
TGACATCCAC CAACTACTTA ACATCATGAA ATCTAAATGT TTAATTATAT TAACTACCCA 300  
TCATTTAGAT GAAGTTGAGG CACTTGCAGA TGGTTATCAA GTTAATTGGG CCAGGTnCCC 360  
50 TTTTnTTCAA CAGTTTTTTGG GGGCCAACCA TGGGCTTATA 400

(2) INFORMATION FOR SEQ ID NO: 721:

(A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 721:

10 CTTATTTATA TTATAATATA AATATTTTAT TTTTCAATAC TTAATTTTAA AAATCCCCTA 60  
 TGAAAATGTT GATGAGCTAC ATCTTTAAAT CTTATTATAC ATTGTATAAA ATTATATTGC 120  
 GAGGTAGTAA ATTGATATTA TACACTTTTG GTTGTGTATG CATCTCACCT ATCTTTTTTTG 180  
 15 CTTTTTTCAA ATAAGAAAGT ATTAAAAATy AATGCCTATA CAGGAACAGA CATGGCTAAA 240  
 CTTGATTTAA ATAGTCTTGA CGACGAGCAC GTAAAATTAT TAATAAATGA ATTAAAATAT 300  
 CCAGAAACTC ATATCGATGT AAATGAATTA AAAACAATAG TTGCTAGTCG AATAAATGAA 360  
 20 AGGCAAGAAA TAATAAGTTT TAAGTTAGGA ATAAAGTACT TATTAACAAT AAAAAGAGGG 420  
 AACATAGAAA AAGATAGGTT TTCAATTTCA ATCATTTTCA AAGATACCTA TCACACCCTA 480  
 25 GTTAGAATAG ATATTAACGG TGGTACTCAC GATAATCCAG ATGGAACAAT CGCTCCGAAA 540  
 AGTCATATTC ACATATATAA TGATAAGTAT 570

## (2) INFORMATION FOR SEQ ID NO: 722:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 722:

40 ATTTTAGTCT TAGGTGTTGA TTGCATGATG AATGCAGAAG TTATACCTGC AGCCATATTA 60  
 GCACCTTCAT TATTGTGTAT AATTGGAATA TTATTGCTT TTAAAGTATG TCCAATTAAG 120  
 TTTGAAGTCG TTGTTTTACC ATTTGTTCCA CTGATAAATA CAATATCATC AACTTGCTCT 180  
 45 GCTAATTTTC TTAATATATC TGTATCCACT TTTCTAGCGA TTTGTCCAGG TAAATCTGTT 240  
 CCTCTTTTAC CTACTGCTCT ACTTGCTTTA CGCGCCAATT TCGCTAGATG GATTGCCGTC 300  
 CACTGTCTCA TGTGTTTCCT CCTCAAATt CCACTCGCAT CATTATAACA TGACAAGGCA 360  
 50 ACTTCAAAAA AGTTTCTCAA TCACAAATnG ATACCAGTGT 400

## (2) INFORMATION FOR SEQ ID NO: 723:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1113 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 723:

	GATTATATGC TGTGGCAA ACAATATACC CAGATGAATT TTTATTTTTA GTAATAGTAT	60
10	AACCATGCTT TGTCTTACTA ACTTTGACAG CTTCTAATGA ATTTGAAGCG TCTTTAAGCG	120
	TGGTATAATC TTCGCCGTAT ATCCCTTTTA AATTACTCG ATACTTACCT TTAGGCAATG	180
	ATAATCTAAT TCTATCTGGA GCTTTAATGC GTATCGTTAC GGGTGTTACA ACGCGTCGAT	240
15	ATTTATAAGT GAGTTTATTT CTTTCTTGTG TATATTCATT CACTTTAACA TCATGAGCTT	300
	TATCCGGCGA AAGTAATTCT AAATCCATTT CAAAATACAA ATCTTTAAAT TGATTAGAAA	360
	CTGATTTTGG CAACTGTACA GTTAGACCAC CATTATTTTG TTAACTTGT AATAAATGTT	420
20	TTGTAGGAGA TTGCCAGGCT GCACTATTTA ATTAAATTGT TGAATCTGAT AGTAAATTTT	480
	TATTGGCTTT AAAATGTGTA TTAACATCTT TAATATTGTT AGAAACAATC CCTTGCAACA	540
	TTGCTTGTTT TTTATCTAAT GGAGATTTTA ATTCTTTATT GGAAAAGACC TTATTTGTAA	600
25	TATGTGCACT TGGATAATGG ATGGTATTTT TAGAATGAAT CCAACGAACT TTATTGTCTT	660
	TGTGTTTCTA CTTAATTTTA AATCCATATG GtAAGTTGTC ATCATGATtC ACTCTAATTC	720
30	GATCATTAAC ATTCCAAAGT GATAGTaAAT TTgACGATgC CAAGTAATCT ATAAGTGCTG	780
	TTTTTATCGA TTGGCATATT AATTTGGAGT GTCTTGTCAT AATATTTTAA AATGTCTCCA	840
	TTAAAAATAC TAGAATATAA TGAAATGCCA TTATAATGAT ATATAAATGG TGAATTTAAT	900
35	GCATAGTCTG ACATATAATC AATGCGATTA AATGAGCCTG TTGCATTTTG ATTTATCTTT	960
	TTTATAAGCT GGTTTACATA GTTACTATGG TAATCATGTT GTTTCACGTT TGATAATGAT	1020
	TGTTGATAAG GTTTGATTGC CATGTTTTTG TTGTTATCTA AAATGACGAT TTGTTGAATC	1080
40	ATaACGATTA ATACTAATAT TGCAACGGTT AAT	1113

(2) INFORMATION FOR SEQ ID NO: 724:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 464 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:

55

TTGCCGTTTAG CAAAATCTAG TATCGCTTGA TGATCAGATT CTGAAATTTT AGTGTGTACT	60
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GATTGATTAA GTTTATATGC AAGTGCATGT TCTCGTCCAC CAGCACCAAT TACTAATACA 180  
 TTCATTTATG TTACGCCCCT TTAAAATTAG TGTTTAAAAT GTCGAGTGCC TGTGACTACC 240  
 5 ATTGCAATAC CATGTTTATT AGCCATATCA ATTGAATCTT GATCTTTAAT CGAACCACCC 300  
 GGTGGGATAA TTGCCTTTAT ACCATGTTGT GCTGCAAGTT CAACTGTATC TCCCATAGGG 360  
 AAAAATCCAT CAGATACTAA CGGCTACATG ATCATTGATT TCAATAGCTC TCTCTAACGC 420  
 10 AATTTTAGCA GCACCGACAC GATTCATTGG CCAGCAnCTA TACC 464

(2) INFORMATION FOR SEQ ID NO: 725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1440 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 725:

GTAAATnCA nTATTnAAA TaTATTACCT TATTAGAAAA AGTCGTAATA TGAGGTGTAC 60  
 25 AAATGACGCA AATTTTAATA GTAGAAGATG AACAAAACCTT AGCAAGATTT CTTGAATTGG 120  
 AACTCACACA TGAAAATTAC AATGTGGACA CAGAGTATGA TGGACAAGAC GGTTTAGATA 180  
 AAGCGCTTAG CCATTACTAT GATTTAATCA TATTAGATTT AATGTTGCCG TCAATTAATG 240  
 30 GCTTAGAAAT TTGTCGCAA ATTAGACAAC AACAACTCTAC ACCTATCATT ATAATTACAG 300  
 CGAAAAGTGA TACGTATGAC AAAGTTGCTG GGCTTGATTA CGGTGCAGAC GATTATATAG 360  
 TTAAGCCGTT TGATATTGAA GAACTTTTAG CAAGAATTCG TGCAATTTTA CGTCGTCAGC 420  
 35 CACAAAAGGA TATTATCGAT GTCAACGGTA TTACAATTGA TAAGAACGCT TTTAAAGTGA 480  
 CGGTAAATGG CGCAGAAATT GAaTTAACAA AACACAGATG TGATTTACTA TATCTTCTAG 540  
 40 CTGAAAATAA AAACCATGTT ATGCAACGGG AACAAATTTT AAATCATGTA TGGGGTTATA 600  
 ATAGTGAAGT AGAAACAAAT GTCGTAGATG TTTATATAAG rTATTTACGA AACAAAGTTAA 660  
 AACCATACGA TCGTGACAAA ATGATTGAAA CAGTTCGTGG CGTTGGGTAT GTGATACGAT 720  
 45 GACAAAACGT AAATTGCGCA ATAAGTGGAT TATTGTTACC ACGATGATTA CGTTTGTCAC 780  
 GATATTTTTG TTTTGTTTAA TTATTATTTT TTTCTTGAAA GATACACTGC ATAATAGTGA 840  
 GCTTGATGAT GCaGAACGAA GCTCaAGCGA TATTAATAAt TTATTTCaTT CTAaGCCTGT 900  
 50 TAAaGATATA TCTGCaTTAG ACTTGAATGC aTCTTTaGT AAtTTTCaAG AGATAATTAT 960  
 TTATGATGAG CATAATAATA AATTATTTGA GACATCGAAT GATAACACAG TGAGAGTTGA 1020

ATATTTAATT ATTAAAGAAC CAATTACAAC GCAAGATTTC AAAGGGTATA GCTTGTTAAT 1140  
 TCATTCACTA GAAAATTATG ATAACATCGT AAAATCATTG TATATCATTG CGCTGGCATT 1200  
 5 TGGAGTGATT GCAACAATTA TAACTGCCAC AATCAGTTAT GTATTTTCAA CACAAATTAC 1260  
 TAAACCGCTT GTCAGTTTAT CAAATAAAAT GATTGAGATT CGACGAGATG GTTTTCAAAA 1320  
 TAAATTGCAA TTAAATACAA ATTATGAAGA AATAGATAAT TTAGCAAATA CGTTTAATGA 1380  
 10 GATGATGAGC CAAATTGAAG AATCATTTAA TCAACAAAGA CAATTTGTTG AAGATGCGTC 1440

(2) INFORMATION FOR SEQ ID NO: 726:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 375 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 726:

TGATATTCCG ACTGCGAGG ATTATTGCGC ATTAAGGATT AACGCAGTAT GAGTCCAAAG 60  
 25 ACGCGCGACA CCTGGAAAAA GGATTACCTA ATGCCTTATT TACAGTAACC TTGTATGATA 120  
 AAGATCGGTT AATTGGTATG GGTAGAGTGA TTGGCGATGG CGGAACTGTT TTTCAAATTG 180  
 TTGATATTGC AGTTTTGAAA AGTTACCAAG GTCAAGGTTA CGGCATCTAA TTATGGAGCA 240  
 30 TATTATGCAA TATATTAAAG GTGTGGCTGT TGAGAGTACA TACGTTATCT GATTGGCAGA 300  
 CTACCCAGCG GGTAAATTA TATACCAAAT TTGGGTTTnA TACCTACCGA ACCAGAnTCC 360  
 AGGCGGTGAT GTATG 375

(2) INFORMATION FOR SEQ ID NO: 727:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 727:

TAAAAAATT AGAGATGAAA ATCATATTAT TTATCTGTTT TTGGGACAAT TTTTACTAA 60  
 AAATGAAGAT CCATGGCATC AAATACTTAA TGATTTAGAA GTTACAAATT CTGTTGATAA 120  
 50 TTTTTTAAGG TCAATAAGTA ATAAGGCCAA AGAAACAAAA AAAAGAGCTT TTATTATTAT 180  
 TGATGCGCTT AATGAAGGTG AAGGTAAAAG GTTATGGGGA AATTATTTTC AAAGCTTTAT 240

AGATGTTATA TTACCCAAAA ACGCAATACA AGATAACAAT ATTGTAGTAT TTCAGCATGA 360  
 AGGTTTTAGT AAGGAAGAAA ACTATAATCC AATTGTATCT TTTTGTGATT TTTATGGATT 420  
 5 AGAGCTACCT AAGTTACCTA TATTAAATCC AGAATTCAAC AATCCATTAT T 471

(2) INFORMATION FOR SEQ ID NO: 728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 728:

TAGGATGTTT CACCCTgGCA ATTGcTCTAA GACATcTAcA GCAGTAGAAT ayCCTGTTTT 60  
 20 CGTcTTTTTA ATAACAGGTA ATTGTAATGT CTCAAACAAT ACAACACCTA ATTGCTTAGG 120  
 AGAATTTATA TTA AAAATCTT CACCAGCTGC ATCATGGATA TTTCGAATCA AGACGTCTAA 180  
 TTTTTCTTGA ATTTCTTTTT CCATTTCTTC TAAATCATGA ACATCTGTAA ATATACCAAT 240  
 25 TTCTTCCATT TCACTTAAAA TCTTAGCTAG CGGTAGCTCT AAATCAGCCA AGAGTTCTAC 300  
 CTGATTGTAT TCTTCTAATT GTTTATCCAT ATTTGGTTTC GCAAAGTAAA TTGCATCAGT 360  
 AATAGAAGCA ACATATGGAT TTA AACATC ATCTTCAGGT ACCTTAAATT TCTTACCTTT 420  
 30 TCCATATATA CTCACATCGT CTTTCACAAA ACTTTGACCG TACAATGAAA CAACTGATTG 480  
 AACATCACTA ATCGTACGAG ATGGATCAAT TATATACTG GCCAACATAA TATCGAAAGA 540  
 AATATTTTGA ATATCAATCC CCAATCTATG TGATGCTACA TATGTTTTTT TAGCATCATA 600  
 35 TACGACTTTT TTCGAATTCG GATTTTCTAA CCATGAAACT AGTTTCGACAT AATTATTTAT 660  
 GTCATCCGCA TTAATTACAA TATGTTTCTC ACCTGtAAAT aAAGAGAATT TTAAAAtATT 720  
 40 ATTTcGCAAA TAGtTACCAC CGtCTAATTC GAAATGGATG GCCGCTTCTT TcAATGAAGT 780  
 AAAATCcAAT ATTATCAAAA GACGTTTcCa ATTTCAAATG TCTTtTCTAT TGCATCTTCA 840  
 ACGcTtGCTG ATTGaTCAAT GTCAGCCAAC AATTGTTTGA ATTCTAACTT CTAAACAAT 900  
 45 TCGATTTTTT CTGTGTGTTT ATCTtGAKGA GTCATTAACG TATCTTCaAG TTTTACTTCa 960  
 ATCGGACTAT CTACATTAAt CGTTGCTAAT TCTTTACTCA TTAATGCATC TTCTTTGCTA 1020  
 TTTTGAAGTT TTTCTTTTAA CTTTTTACCT GAAATTTcAT CTAAATGTTT ATAGACACCT 1080  
 50 TCTACTGTGT CAAATTGGTT TAGCAATTTT ATTGCTGTTT TCTCTCCAAC ACCTGCAACA 1140  
 CCTGGTATAT TATCAGAAGT ATCTCCCATT AATCCTTTCA TATCAATAAT TTGATTAGGT 1200

CCTTTTTTAG TGTAATAAAT GGTTACATTA TCCGTTGCAA GTTGTGTTAA ATCTCGGTCT 1320  
 CCCGTAATAA TAATTGTCTG AAAGCCCGCT TTATCTGCTT CTTTACTTAA AGTTCCGATA 1380  
 5 ATATCATCTG CCTCATAGTT ATCTAATTCA TAACGTTTAA TATGATAAGC ATCTAATAAT 1440  
 TGGCGAATAT AAGGAAATTG CTCACCTTAGT TCAGGCGGCG TTTTCTGGCG TCCACCTTTA 1500  
 TATTCACATAT ATTTTTCATG TCTGAAAGTC GTTTTACCTG CATCAAACGC TACTAAAAAA 1560  
 10 TGATTGGCT TTTCTTCTTT TAAAATCTTC TCTAGTAACA TGCAAAACC ATATACTGCA 1620  
 TTGGTATGAA TGCCTGCTTT GTTTGATAAC AAAGGTAATG CATAAaAGC TCTAAAACCT 1680  
 AAGCTATTAC CATCGaTTAA TACTAATTTA TTCACAATTT TAACCTCCAG AACTAATTTA 1740  
 15 TATATnTGTG 1750

## (2) INFORMATION FOR SEQ ID NO: 729:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 729:

AAATTAATTT TAACATCCTT TCAAAATAGT TTTAACGGAT CcTCCcAAAA CGTAAACTCA 60  
 30 CATCAGTTAC TTGTAACATG CATTTTCTCC TTTTTTTCAT TCGATATTCT AACGGAAGAA 120  
 TTATATCATA TTATCGTCAC AGTTTCGACC TCATATAAGT TGTAATGATA GAATGACTCA 180  
 CACATGTTAT AATAATAAAG AATACAAGAA TCGAAGGAGA ATAAACATGG CATTAGACAA 240  
 35 AGATATAGTA GGGTCTATAG AATTCCTTGA AGTAGTAGGG TTACCAAGGT CAACTTACCT 300  
 TTAAAGGAC CAACGGTGAA ACGTAAAGTT AAACCAATCA GAATGAACGT GATGATTGAA 360  
 40 TTAGAAGTAG GGGAGnATAT AGTTCCTCAT TTATCCAACC GGTcAGGTGG ATTATTGCAC 420  
 TCAAATATGC nGnTATACG 439

## (2) INFORMATION FOR SEQ ID NO: 730:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 481 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 730:

55

AGTTTAGGAT TGATGACAAA GCCATTACGA CCAACAAATC CTAAACCTGC ACGTTCTGCT 120  
 ACTGCCCTAT CTGATAATAC ACCCGTATCT ACCATAGATT TGATTTC AAC ATCTGGA ACT 180  
 5 TTAGATTCAA TAAATGCAGC TAACATGTCT AATCGTTTAC GCATAATTGT ATGATAATCT 240  
 TGACCCCACG ATGCTCTAGC AAATAAGCCT CTGCGATCAC CTCTAACACT CTTAGGTGCA 300  
 CTTTTCAGTT TGTTAGGATA ACCAACTGCA ATTGCTATGA TTGACCTTGC TGTTGGTAAG 360  
 10 GATAATTTAG GCTCCGTTTCG TAAAGCAATA TCAGATTCTT CAAATCCTGA GGCATAACCA 420  
 TTTGCATGAT ATGCTTCTAG CTTTTCCTTC AATTCATCAA AGGGnTCGGC AGTAGTAAAT 480  
 15 C 481

## (2) INFORMATION FOR SEQ ID NO: 731:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 828 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 731:

GTGATGAAAA ATCTTTTTCT ATTGATTGAG AAAATAGTTA TTTATATAGT TTTTAAAGAA 60  
 AAAAAGTGAT AATATTTAGC TAATCTAATG AAAATTGATT TATTGGACAA AAAATACATT 120  
 30 TTAAATGAGT AGAGGAGGCT GCAAwTGGGT TACAGAACTT TAAAAAGTAT TTTTCATGAA 180  
 CACAATGAAA GTAAAATGAA GGAAGAGTAT ATTAAAAGAT TTAATTCCTT mGCTTCCTTC 240  
 AATACTAATA TTAATATCAT ACCTATGGAA AATGGAAAAA AAGTTAATGA TTTGGAATAT 300  
 CCTCTATTCT TTATGGTGAC TAAAAATCTA TCAAAAAAAC AAGAATTAAT ATCAATTAAT 360  
 AGTAGAAAAA TTGATAGAGC ACTTAATTCT TTACCATATG CAGCTAGAGA ACAATATTTT 420  
 40 AATGATTTAT TAATCGATGA ATTACAAAGT ACTAATGAAA TTGAAAATGT ATTTAGTACT 480  
 AAACAAGAGA TTGCACATGC GTTAAATAAC CAAGCATCAG AATTTCTTAA GTTCAGAGGC 540  
 CTCGTGGATC AATATAAAGA GATAGAACTT AATAAAAAAA TTAAAGTTGA TAATGTAAGA 600  
 45 GACATTAGAG CGATTTATGA TAAATTAGTT TCAATGAAA TTAACGAACA AGATAAGTTA 660  
 GATGGAGAGC TATTTTCGTAA AAATTTTGTC GGTGTGCATG ATGGGTCAAC GAATAAATAT 720  
 ATACATGTTG GGTACAACC TGAAACCAAA ATTGTTGAAT TTATAGGTGA AATGCTAACA 780  
 50 TTTTAAAT ATTTTGATGC GCCTCAGCCG TTCAAATCA TGGCTAGT 828

## (2) INFORMATION FOR SEQ ID NO: 732:



(A) LENGTH: 1622 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 732:

10	CGTATGTTTC GAATTTTATG nATTGCATTG GATAATAGTA CCAGTTAAAA GAAC TAAGAT	60
	TGTAATTATC CCCCTTAAA ATTCAAGAAT ATATTTTCTT AATCTATCAG CAAGAGGTTA	120
	TATTTCAAAG TGTTTATTTT TAAAACAACA TCTAAAAGCC ATTTcATAAt AAwGTTAAAT	180
15	CaTTAGaATG TATAAAGATT CCaATTAATA AAAATAGATA AAATGCAATA AAGTTCCAAA	240
	TACTTATTAT TATTCATCAC AAATTACGTG ATGCCCTCTA CAACACTAAA TCAAGGATGA	300
	TATTTATTTT ATATACATTA GCATTCATTG TTTGCTTACC CACATTATCC TGTTTAGTCT	360
20	TTTTTATAAC TCTAGTCTTG AATGTCATAT TTACAAAGAA AAAAACAATA AAATATTTAA	420
	AACTAACACT ATTTATTAC TTTGTTCTTT TATAGCACCT TTTATGTTTA TTTTCTTGTA	480
	TTCAATAAAT AGTATGGAGA TGATAATTTA AAGTAGATAT ATTTGAAGTA TACTATAGAG	540
25	TAAATTATAT TGGGGAAATA TGTAACGAA CCGGTTGATT TTATAGTGGA TTAACACTTC	600
	ATAGAGAATA TAATCAAGAA CAAAAACAGT CAATAGGTGT GAATTTTTTTT AAAGACGGAT	660
30	CTGTTGCTAC TAAAAAAGA AGTATACAAT TCAATAGTTA AACCTTAAAA CAAGAAATAT	720
	TATTCAAAAT CAATGAATTT CCTATCTTAT TAGTTTTAAC AATATTTATT CTCATAGAGT	780
	TTGTCCAATT AAATATAGAT GATTCAAATA TTTATAAGCA TACAAAAGAG CAGTAAGACA	840
35	TTTTCTAATA GAAAATAACT TTAGTGCTCT TTGTACATTA CTCATCAACT ATTGTAAATT	900
	AAATAATAAA TAACTACCTA TTTTATTATT CAGCTAAAAA ATGCTCTGCT AAATATTTTG	960
	CTGCGCCATC CTCCTCATTG GTGTATGCCG TTACATCTGA AGTTAATGCT TGGATTTTCA	1020
40	GGCGTGCAAT TTTCATAGCA ACTGTATAAT GACCAAATTC AAACATTGCT CTATCATTGT	1080
	CGCTATCTCC AATAACTAAC GTTTCTTCTT GATGAATACC AAAATGTGCA ATCATTCTCT	1140
	TAATGCCTGT ACCTTTATCA GTTTGATAAG CCATTGTTTC CGCATTAAAT CTTGATGAAT	1200
45	TTGARACACT AATCTGTAGT TGCACATGAT TTTGCTTTAA TTCATCTCTA AATGCTGTTA	1260
	TTTTTTCTAA ATTAGAACTG AATAGATAAA TTTTGAATA TTCACCTTCA GGAAACTTAG	1320
	TTACCCAATC TATCTTACCA GCAAGCGCAT CTTGTCTTGA AGACCATTCA CTATGACTTA	1380
50	CGCCATTAAAT AGGATCTTGA CTACGAATCA TATCTCGCAT CCATGTTTCA TCTTCTTTTA	1440
	AAGAACTCT ATTACCTTCA AAAGGAAATA CCTCATAATA AATTTGTTGG CGCTTAGCTA	1500

CTACTTCTCC AATTGTTCCA TTTGAACTAA TGATGCCATT AACCGCAAAA TCTTGAGGTA 1620

CA 1622

(2) INFORMATION FOR SEQ ID NO: 733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 733:

AATGCCAaAT	AAATCCAAAT	TCTTTTAACG	AACAAGAGTG	CCCAAGTTAT	TGCTGATCGT	60
TATGCCAGAT	AnGCATATCA	ATGATAATTA	TGGTTTAGAA	AGAATTCTTA	AGACAAATCA	120
TGGATATAAT	TATGTGTATT	CCAATGATAA	TTCAACTAGT	AAGCAACATG	TAAGTATTTT	180
AAATCAAGGC	ATAATAACGA	AATAATAGAT	GGAACAGTGT	ATTCTAATTG	GATATACTGT	240
TTTTATTTTG	CAATAATTTA	ATTTAAAAAG	GTGAATTCAA	CTTATAAAAT	GATGTAAATG	300
TTATGTCAAA	ATCAACCAAT	CCGTAATGTA	TTTTAAAATG	TTAATATAGT	TCTGAAGAAG	360
TATAAATGAG	GTGTTGAAAT	GGCTAAAAAT	AAGAAAACgA	ACGCGATGCG	TATGCTTGAT	420
CGTGCAAAAA	TTAAATACGA	AGTTCATAGC	TTTGAGGTAC	nTTAAGAACA	TT	472

(2) INFORMATION FOR SEQ ID NO: 734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 734:

CATAGCCCCA	AATTTTTTCT	ATTATTTGTT	CACGAGTAAA	GATTTGCTTA	GGACGTGCTG	60
CAAGCATAAA	TAATAATTGA	AATTCCTTGT	TCGGTAACGT	CATCGTTTTA	TTAGATACTT	120
GGAGTTCCAA	ATAGGATTGG	TTAGCGTTA	AGTTGCCAAT	AGTCATTTCT	GAATTTGAAT	180
TGATATTATA	TCGACGTAAT	ACAGCACGAA	TTCTAAAAAT	AAGTTCCTTA	ACCTCAAAGG	240
GTTTG GTTAC	ATAATCGTCA	GTACCGCTTA	TAAACGCACG	CTCTTTGTCA	CTAAGTGCAT	300
CCCGCGCTGT	TAACATAATA	ACTGGTATAT	CATAATCATT	TTTAAATGTA	TTACATAATT	360
GAAAGCCGTC	CATACCATCC	ATCATAATAT	CTACCACTGc	AATATCGaCA	CGCTGTTTTT	420

GTTTTGTnAA ATGGGCTAGC TATAATAATT TAGGGGATT

519

## (2) INFORMATION FOR SEQ ID NO: 735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735:

ACTTGAAAAC GATAAACAGT ACTTTCAGC TACACATTGG AAAGCTATAA ATGGGATACC 60  
 TTATGCAGGC AGTAGTGATA TTGATGGATT GCCTCAAGAC GGTATCATTT CGGTAAATGA 120  
 TAAAAATAAA TTAGATAATT TAAAAATAGG CGAACAGGAA TTATTCAAAA TAGCATTGTA 180  
 CAGAAATCCC CAAACGGTAA ATTGTGGAAA ATAACAGTTG ACGATAGTGG GAAACTTGGT 240  
 ACAGTGCTAT TTTATTAGAA AGGAAGGTGC ATTATGGAAA ATTTGTATTT AATAAAGGAT 300  
 TTGGGAGCTT TAGCAGGTCG AGATTATAGA GCTAAGGAAA TACAAAACTT ACAAGGAATA 360  
 GGCATTGCGC TGGGCTGACC ACCAGGGTTT AnGTGnCCnC 400

## (2) INFORMATION FOR SEQ ID NO: 736:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 780 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736:

CTTTTTTATT GAAAAAGTGG TATTTGATTA TCTATTTACT ATTTATATTA GCGGCACTCC 60  
 TTATTACATT AACGACAATC CAACATGTAA CAGAAGATGA CAATCATnTT AATATAGGTG 120  
 TCGTAGATAA AGATCAATCA AGTGAAACGA AATTAATCTT AAACCTCTATT GGTAAAGGGA 180  
 GTAACCTAGG AAAAAACGTG AGCATTAAAG CATATGATGA TAAGCAAGCA CATACTTTGT 240  
 TAAAAAAACA TAAACTTCAA GGCTATTTTG TTTTGTGATAA AGGTATGACC AAGGCATTTT 300  
 ATAAACAAGG CGAACTACCA ATTTTCAGTAT ATACATATGA TCAACAATCC ATGAAAAGTG 360  
 TCGTGCTATC TCAGCTAACA GATTCTGTTT ACCAACGTCT TATGCGATCA ATGGGTGGCA 420  
 TCTTAGCTTT TCAAGACTTA GCACCGAAAG CATCACATTC TGACAGTATC AATGTTATGA 480  
 CTGATTTGCT GATtACAGGA TTAAACCGTT CAGGTGCatT TAACTTAGAA CCGATTCATT 540

CACTATCTTT ATTTACAGTT TTGAAAATGA ATCAAGATAC TGTATTGAAA GCGCGATTGA 660  
 AAATGTTTCA TTTTCTAAA GAGCGTTTAT TAATCATTCG TACGTTGATT ACATGGTTTT 720  
 5 ATACTATGTT ATGGGnGTAT CGnTGGTGTA GTTTGGAATG TGGTTCAGTA TTCCGAATnA 780

(2) INFORMATION FOR SEQ ID NO: 737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 946 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737:

TATTTAATTT CTnATTnTG GTTTTTAATT nTAAGATGAC CATAAATGAA TTTCTTCTGC 60  
 TGTCATAGAA TTAGAGCAAA ATACGAGCAT AAATTTAACT AATTTCTTGC TTGTCTTATA 120  
 20 GTCTTGATTG CCTTGTA AAA ATGTTAGTAT TAATGCTTC ATCGTTTCGA ATTGTTGTGT 180  
 TGATTTAATA GCGATTGCTA AACCTATATT TTTTTCGAAA AGCTTTTCAA AACATCTATT 240  
 25 TAACAGGTTG TAATTCGTTT GGCTAATCTC AATATCGTGA ATATCGTCAA TGAAAACGAC 300  
 AGGTTTTGGT AAGTGCTCAA AGTTAATATC GTAATATTCA TTGAAAAtAA ATTGAAATAG 360  
 TTCATTGAAA TTACTAAATC GAACAAATAC TTTGGCACGC TGACTTCGAT CTTTCGGATT 420  
 30 AAAATCATCT ATATGAATAT CTGTTGTATT TGTAGCCAGT TGAGCTGTTA AATCAATTGT 480  
 TGAAATTAAC TCAGTGAATT GTGATACGTT ATCTTGTTGG AAGTGTATTT GTGGTGGTTC 540  
 AGTAATCTTG GAAACGAGTG AACGGAAGTG TTTAGGACTA AAATGCAAGT AATTCTTAAA 600  
 35 TTGATTTGCA AAATTTGTAT GACTGT TAAA ACCGGCCAAT TCAGAAACAG TTGTAATAGA 660  
 ATGTTTTGTA GAAAGTAATA AATTGATGGC GTTAAACAAGT TTAATACTTG TAAAATAATC 720  
 TTTAAAATTC ATACTCAAAT ATCGAACAAA AAGATTAGAA CAATATGATT CAGAGATGTT 780  
 40 GCAATGCATC GCTATATCTT TTAAAGACAA GTGCGCATCA ATATkGTCAT GAATATAGTT 840  
 TACACAGTCT ATGAACACCG GATTGCTTAA AGCAATATTT GGTAAATATT CATGATCTAT 900  
 45 TCTTATAAAA GCTTCTTTAA GTAAAGTGTC TATnATACTT TGACCT 946

(2) INFORMATION FOR SEQ ID-NO: 738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 738:

5 TTTATTTGAT GATGTACTAA AGCAAGATGA AAGATTTGTT ATTGTAGTTC AAGCATTAGA 60  
 AGAAAAGAAC GGACAATTAT TAAAGAGAAC TTTAAGGGAA TATCCCGGTT TAAACCATAA 120  
 ACAAATGAAT GATTTATTTA TGCACTTAAA GGAATTATTT TCCGAAGAAT CATTTGCTGA 180  
 10 AAACCAATCA GCGTTCAGTA TTACAGTTTA TACAAATTTA GATTATACTG CTGACCAAT 240  
 ATATGCTCAT GTAAAACGTT TCAGAGGTAA GCATGACTGG ACACAAACAG CTAAATAAAA 300  
 TCAAGATGCT TGCAGTGgAT TkTAACmATT AATGtTAGaT gTCmCyGcAT TTTTaATGCC 360  
 15 ATTCGGTAAT TAATCCGGAT GGTCCAATTT AATTAAC 397

## (2) INFORMATION FOR SEQ ID NO: 739:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 915 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 739:

CAAGGTATTT CATTTGACCC ATTCACACCA TTAATAGTGG CAGCAGCATT ATACTTTGTC 60  
 30 TTAACATTTG TACTTACACG CATTATGAAC ATGATTGAAG GGAGATTGAA TGCCAGTGAT 120  
 TAAAATAAAC AATCTTAATA AAGTTTTTGG AGATAATGAA GTTTTAAAAs ATATCAATCT 180  
 TGAAATCAAT CAAGGGGAAG TAGTAGCAAT AATAGGTCCA TCTGGTAGTG GTAAAAGTAC 240  
 35 ATTGTTAAGA TGTATGAATT TATTAGAAGT ACCTACTAAA GGTCAAGTGA TTTTGAAGG 300  
 CAATGACTTA ACGGAAAAAG GGACACAAGT AGATAAACTA CGTCAAAAAA TGGGTATGGT 360  
 ATTTCAAAAC TTCAACCTAT TTCCACATAA AAAAGTTGTC GATAATATTA TTTTAGCTCC 420  
 40 TAAATTATTA AAGAAAGATA ATAACGATGA ATTACATAAG GAAGCATTGT CGTTATTAGA 480  
 TAAAGTGGGA TTAAAAGAAA AAGCAGATGT ATATCCGAAT CAATTATCAG GTGGTCAAAA 540  
 45 ACAAAGGGTA GCAATTGCAA GAGCTTTAGC AATGCATCCA GATGTTATTT TATTCGATGA 600  
 ACCAACTTCA GCATTAGATC CTGAGGTAGT TGGTGATGTA TTAAAAGTAA TGAAAGACCT 660  
 AGCCAAAGAA GGTATGACCA TGGTGGTTGT GACACATGAA ATGGGATTTG CCAAAGATGT 720  
 50 AAGTGACAAA GTCATATTTA TGGCAGATGG CGTTGTCGTA GAGTCAGGCA CnCCAGTCGA 780  
 AATATTTGAA CAACCGCAAC ATGAAAGAAC ACAAATTTTC TTAGCAAGAG TATTATAACA 840  
 55 ACCTAACGAG GCTTGAATAT ATGATACGCA CCACAAAGTT ATATCATATA TTCAAGCTTT 900

## (2) INFORMATION FOR SEQ ID NO: 740:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 740:

```

AGTAAATGCG ATGTTGCATG GAGGCTATAG CAATGAGCAA TAAAGCTTGG GGCGGTAGAT      60
TTGAAGTACA ACCTGAAGAG TGGGTTGACG ACTTTAACGC ATCCATTACT TTTGATCAAA      120
CGCTCATAGA TCAAGATATC GAAGGCAGCA TTGCACATGC AACTATGCTT GCGAATCAAG      180
GCATTATTAG TCAACAAGAC AGCGAACAAA TTATACAAGG ACTAAAATCT ATTCAACATG      240
ATTATCATCA AGATCAAATT CAATTAGTG CATCATTAGA AGATATTCAT TTAAATATTG      300
AACATGgAAT TAATTAAACG TATCGGTGgA TGCTGGTGGT AAGTTGCATA CTGGACGCgT      360
AGtAAACGAT CAAGTTGcAA CAGACATGCA CTTGTACACT GAAGAAACAA GTGCAAGnnn      420
TCATCGCATT GGATG                                          435

```

## (2) INFORMATION FOR SEQ ID NO: 741:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1198 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 741:

```

AATATCATAA CCAAAGCTTG TCATTACTTA TATGTAAAGA TTAGAGGCTA ATTACATAAT      60
CCTAACTTAT TTAACAGGAA GTCATGAAAA CTATATTACA ACTAAAAGTA TAACTTTCCA      120
TCACCAAAGT CAGAATTTAT TGAAACACTC AACTGATAAT ATAGAAGGCT AATTATAAAA      180
ATACCTGGCG ATTAATAAAC TGTTTCGGTT TTTTAGCACT TAATATATTT AAAAAGACAA      240
ATAGAGCCCT TTCAGGCTCT ATTTnCTGTA TCCTTAACAA CAGAAGCTGT TAAAACTACC      300
CGTCTTTTcA CAaCCAAaGc TaCAAAAaAG aTgGCTAGTT ATTCTTTTCGT CACCCGCTGA      360
ATCATTAGTG TTGTTATTTT CTTTAACTTG CACGTCTAAA TCAAGAAcTT TTTCCAAaGA      420
TaAAACCCCC TATTTAAAAG TTGAAGTTAA GACCCcTTCA ATTGTCATAT TAATCATTAC      480
CACACAATAA ATCAATGAAT TTAATAATAA TTATTTGTTA TTAATTTGTA AATCGTCATT      540

```

TGAATATTTT TTGTTTAACT CTAAATTTTC GGGTTTAACT TCCTCTATTT CTAACAGTTA 660  
 TACTCCAGGA TTAGTTTCTT TAGAATCCGT ACCGATTAAT TTAACAGTAT GGTTTTGCCA 720  
 5 GTCAACTTCA TAAGTAGATG TAAACGTTAC TGTATTTTGA TnTTTGTAGT TATTTCCAAC 780  
 CCAGTGTAGT CGATTCCATT GATTAGTATA TCTATCCATT TCTCTTTGGT AAGTTACTTT 840  
 10 GATTTTAGAT TtTTTTGTAT CATTTTGTTT ATGAGAAAGT ACGCTTATAA ATTCTGGGTT 900  
 AAAGTTACCA CGCGCCAATA AAGGCATTTG ATGTGTTGGC AAGAAATTTT GACCAGCATT 960  
 TGAACTACTT TGTCTACCAC CTAAAAACAG TTCATTACCA TATGTTGGGT CATAACTATC 1020  
 15 TCTACCATAT GGTCCCCAAC CATTATTCAT AATTTTGTGC GCCTCAACAC CCCAGCCAAT 1080  
 TGATTTATGA TTTGTTTTTC TATCAATCGT AGTCTGTAA CTTTCTTGTT TATAATTTAT 1140  
 CGTTTCTGAA AATGATTTTG ATCCATTTAA TCCACCTGAT AAGCCATTAG ATATATTA 1198

(2) INFORMATION FOR SEQ ID NO: 742:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 818 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 742:

GTGGCATATn CAAACTACTA CTGAAAGATC AATTACATAC GTACAGATTT TGCAAAATGA 60  
 TCAAGATTAT CCAACAATTT TTAGATGAGa CAAACGTAA ATCTGTAATT AATTcAGATG 120  
 35 TTAATGTAAC GGTAAAAGAT AGAATAATGA CTTTATcAAC GTGCGAAGAT GCATATAGTG 180  
 AAACGACGAA AAGAATTGtT GTTGTGCGCA AAATAATTAA GGTAAGTTAA ACAGAAAmGA 240  
 GGATAATTAT GAAATTTATG GCAGAAAATA GGCTGACGTT AACaAAAGGA ACAGCAAAAG 300  
 40 ATATTATAGA ACGATTTTAC ACGAGACATG GGATTGAAAC ATTAGAAGGC TTTGATGGCA 360  
 TGTTTGTTAC ACAAACTTTA GAACAAGAAG ATTTTGATGA AGTGAAAATT TTAACAGTTT 420  
 45 GGAAATCAAA GCAAGCTTTT ACGGATTGGT TAAATCTGA TGTCTTTAAA GCAGCGCATA 480  
 AACATGTTAG AAGTAAAAAT GAAGATGAAA GTAGCCCGAT TATAAATAAC AAAGTAATTA 540  
 CATATGATAT AGGCTATAGT TACATGAAAT AATTGAATTT AAAGAGGTTG CAGTACTTGT 600  
 50 TATGACAATT GGTATTGTTA GCTTTTGTA CGACCATACA TGATACCGAT GATGGTCGTT 660  
 TTTTAAATGa ACACAAACAT GCTAACAACA AATTGCTAAA ACATAGTTTG aTTTGAATGT 720  
 GgCTTTGGAA AATAATCATC CAtTATATCa TTtTGGATTh TATTTTGGAA GAAGAAAAGA 780

## (2) INFORMATION FOR SEQ ID NO: 743:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743:

	TGCTGGTAAA TCTTCCCTTA TCAAGTCTTT AATTGGTGAA TTTAATGCTA CCGGTACTAA	60
15	ATTGTTATAT AACAAACCTA TACAACAACA ACTGCAACAT ATTACATATA TTCCACAAAA	120
	AGCACATATT GATTTAGATT TTCCTATAAG TGTGGAACAA GTGATTTTAT CAGGTTGCTA	180
	CAAAGAAATT GGATGGTTTA GACGACCTAA TAAATCAGCA AGGGATAAAC TCAAACAGTT	240
20	ATTAAGCGAT TTAGAATTAG AATCTTTACG TCATCGACAA ATTTCAGAAT TAAGTGGTGG	300
	ACAATTACAA CGTGTGCTAG TAGCAAGAGC ATTGATGTCC GAAAGTGAAG TTTATTTTCT	360
	AGATGAGCCG TTTGTCTGGAA TTGATTTTAG TAGCGAAAAA tTAATCATGA CAAAAATcGA	420
25	GAACTTAAaa CAACAAGGAA AACTTATTcT TATCATCCAC CATGATCTAT CAAAAGCAAA	480
	GCAATACTTT GATCGCATTa TTCTATTAAA TCAAACATTA CGATACTTTG GTGATAGTGA	540
30	AGAGGCTATG AGTGTCACTC GCTTAAACGA AACATTTATG AGTAGCACTG ACTGTAGTGA	600
	CCCTAGTCAA AGGAGCAATA TAACATGTTA GAGTTTGTCTG AACATTTATT TACATATCAA	660
	TTCTTGAATC GAGCATTGAT AACTTCAATT ATTGTAGGGA TAGTTTGTGG TACAGTTGGT	720
35	AGTTTAATTG TATTACGTGG TCTTTCATTA ATGGGAGATG CAATGAGTCA CGCAGTATTA	780
	CCTGGTGTG CCCTATCATT CTTATTTGGT ATTCCAATGT TTGTAGGCGC ACTTATAACT	840
	GGTATGATCG CAAGTATTTT TATCGGTTAT ATCACATCTA GTAGTAAAAC GAAACCTGAC	900
40	GCCGCTATTG GAATTAGTTT TACCGCTTTC TTAGCTTCGG GGATTATTAT TATTAGCTTA	960
	ATAAACACTA CGACAGATTT GTACCATATT CTGTTTGGTA ATTTACTGGC AATCACAAAT	1020
45	AGTGCAATTT TAACAACATAT TGTGATTGGT TCAATCGTCC TTATTCTAAT CATTATTTTC	1080
	TATCGTCCAT TAATGATTTT TACATTCGAT CCAACGTTTA GTAGAATGAG TGGTCTAAAT	1140
	ACGACGTTAT TACATTACTT TGTGATGTTG tTACTCTCAT TAGnAACAGT AGCAAGTAtT	1200
50	CmAACGGTA	1209

## (2) INFORMATION FOR SEQ ID NO: 744:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 744:

CCGCCTTTTCG TAAACCTAAT ATAATACGAA ATTTTCGTAT TGTCAACATT AAATACGTTT 60  
 10 TTTTCGTAAA AAACCTTACT ATGATATGAA AATTTTCGTAT AATAAGAAAA AAGGAGGTAA 120  
 GTAATATGAA CAAAGAmAGm AATATTATTA TAGCCAAAAm CATTAGAAAA TTTCTCAACG 180  
 ATTCAAATAT GTCTCAAAAG AAACCTGCTG AaCTCATTA CATAAAACCA TCTACTTTAA 240  
 15 GCGATTATTT AAATTACGT TCCAACCCCT CTCACGGCGT TATACAAAGG ATAGCTGATG 300  
 TTTTCGAGGT TGGTAAAAGC GACATAGATA CTACATACAA AGACGATAAC GACATCACTT 360  
 CCATATACAA CAAACTCACA CCTCCCCGCC AAGAAAACGT ACTTAACTAT GCAAATGAAC 420  
 20 AATTGGAAGA ACAGAATTCT AAAGGAGATA ACGTTGTAGA TATTAATTCA TATAAACAGG 480  
 AGAAAACTCC AGTTAACGTC AATGGTTGCG TCTCTGCTGG TGTAGGAGAA CGTTTACACG 540  
 ATGAAACGCT ATTTACTGAA ATGGTTAAAG GACCTATCCC CACACACGAT TTAGCGTTAA 600  
 25 AAGTAAATGG TGATTCTATG GrACCTATGT TTAAAGATGG CGAAATCATA TTTGTGGAGA 660  
 AAACTCACAA TnTGA 675

## (2) INFORMATION FOR SEQ ID NO: 745:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 924 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 745:

40 CAGGTGTCAT AGTTGAACTT GGtGGTTTTG GACTAATCGT TAAATCATCA ATTTGTGTCA 60  
 TCCAAGGTTG GAATTTACTG CCTTGTGTCT CCAGTGCGCT GAAAATACCT TTATCTTGAA 120  
 45 ATAAGTCAAC TAACTCTTGG ATACCTTTAA TTAATGCTGG GTTACCACCA GAAATTGTAA 180  
 CGTGGTTAAA TAAATCGCCA CCAATTCGTT TTAATTCATC ATAAATTTCT TCAGCGGTCA 240  
 TGAGTTTTAT ATCGCCTTTA GCACTACCAT CCCAAGTAAA TGCAGAATCA CACCAGCTAC 300  
 50 AGgATaATCA CATCCAGCTG TTCTCACAAA CATCGTTTTT CTACCGATTA CTCGACCTTC 360  
 ACCCTGAATG GTTGGACCGA ATATTTTCGAG TACAGGAATT TTAGCCATTA GTTACACCTG 420  
 55 TTCCTTTGGT CTAAATACGA CATAACTTGT TGGTGTCTTCT CTTACAAATA CTTGAATACA 480

TACGATTTCA GTTGAAGGGA TTTTGTTTTT AAAAGCAGGT AAGTTATTTA ACAGTTGATG 600  
 GTCAAATTTA CCGTGTATCA TCTTTTTCAT ATGGCTAAAG TTCACTAAGA AGCCAGTGTC 660  
 5 ATCTAGTTTA TCACCGACAA TTGTTAAaya cAAAGTAAGT ATGACCATGG ACATTTTGAC 720  
 AAATACCTGC TTCTTCACAT GGAATGTGAT GTGCAGCCGA AAAATTAAAA TCTTTATTTA 780  
 10 ATTCGAATTG ATATGGATGC GTTGACTAG GATAGATTTG TTGTAACATT TTAAAGCGCT 840  
 CCTTTACTTT CAAGATATTG ATTTAGTCCA CGTTGACGTA AATGACAAGC TGGACATTCA 900  
 CCACAGCCAT CCCCAATGAT ACCG 924

(2) INFORMATION FOR SEQ ID NO: 746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 746:

ATCTTTTGGG TATTTTCTAT ATTAGCTGTT GTTTTCTTAG TATTATTTAG TTTTGCTGTT 60  
 GGTGCATCAA ATGTACCAAT GATGATTTTA ACATTTATAT TACTCGTTGC AACCTTTGGA 120  
 30 ATTGGATTTA CTACAAAGAA AAAATATCGA GAAAACGATT GGCTATAAGT TATATCGACA 180  
 ATAACACGCG TTGATTTAAG ACCACACATG TTCATGATGA ACATTTAACT GGTTTTATAT 240  
 TGGCGCGTGT TTTTATTATT TAAGGTATAA AAGCGTAATA TGTTACCTAA TTGTTAGGAC 300  
 35 TACATATTAC GCTTTTGGTA ATTATTTTGA TTTTCTTTTA AATCGTTGTT CATGTAATTG 360  
 TATTAACGCA TCATGGTGGG GCTCTAAaTA ATCATtGCTA ATTcTTGATG GAGACCmCGA 420  
 TTtCCAAC TA rGATkGAATT kGGACCmCTA ATkGTTAATG GTcctCCTAG TAAATTGGAA 480  
 40 GCTTGTCAT TaCTTCCaATA TAAAtAACCA ATCCGCCAGC AAAtCCCcAT GGtKGAAGTC 540  
 TTGGCGTCAT ATATGCTTCT AAaTTACCTG TAGCAACTGA AACGATTTCA AGCGCTGCAC 600  
 TACCATATGC CCTTGCACTT CTAGAATCAT TAACAATTTT TTTAAAGATT TCTCCTAAAA 660  
 45 TTGGTTTAGT TAACCAGTTC GGATTGATCC CAATAATGCT TTGTCTTAGA TTAGAATCAT 720  
 TCAATGGTTT CAAGGGTTGG CTACCACGAT ATGCACCTTC CCCTACTTTA GCATGATATA 780  
 50 AGACATCAGC CATAACATCA TATACAAAAC CTGCATAAGG TTTACCATCG ATATAAATAC 840  
 CAATTGAAAT TGCGAAATTT TCTTGTTGAT GAACAAAATT CAATGTACCG TCTATTGGGT 900  
 CAACAATCCA TACCGTACCT TTGGAAGTAT CGATGTCATG ACCATGCCCT TCTTCACCTA 960

## (2) INFORMATION FOR SEQ ID NO: 747:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 865 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:

```

TTCTCGTCAC TGTACGTTGT ATTGCGGCAT CATCCATTAT GATACGTTCA GACATATTCT      60
CACCCTTTCA AAATTTAGAA ACAAAAAACC TCATGTCTTT AATATCGACA TGAGGTTTAG      120
TATATACAAT CAGCCTATTT ACATAGAAGA ATCGTAGTAT TACTACTTAT TCTTGCATAT      180
GTGAAAGTGT TATGATCATT TTAGTATATA TCTATATTTT CATGTCTTTG ACGTCTCTCT      240
GGACGCTCAA TTAAAGACTC TTTATGTTGT ACTTAAACTG TTATAAGGAT AATACTAATC      300
AGGCGCTTTG TCAATCTATA TTGAAAAATT AACCATACTC AGTAAAAATG TTAACCTTAA      360
TCTATTTTAT AATGTGTTTT CATTTAAAAA AAACGAAAAC GATAAACACT TATAGTTTAC      420
ATAATAATGT TATCGTAATT ATAGCACGAC ACAATTATGC ATCTCTTTTT CGAATTGTAT      480
CTAATAAATC TTCAAAGTCT TGTGGTAATT CAGCATGTCT TTCAATATAT TCACCTGTTA      540
CTGGATGTTT GAATCCAATA AGTCCAGCAT GTAGAGCTTG ACCACCAATA TCCAATGTCT      600
TTTTCGGTCC ATACTTTGGA TCACCAACTA ATGGGAAGCC AATATATTTT ATGTGAACAC      660
GGATTTGaTG CGTACGTCCT GTTTCAGTT GACATTCAAC AAGCGTATAA TCTTTAAAT      720
GTTCTAGTAC GTTAAATGT GTCAGTGCTT CCTTACCATC ATCAnCAACA GCCATAGATT      780
GACGATCATT TTTGTTTCTA CCAATTGGCG CATCGATTGT ACCGTAATCA TGAGGAATAT      840
TCCCGTGGAA CTAAAnCGAT ATAGT      865

```

## (2) INFORMATION FOR SEQ ID NO: 748:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:

```

ATAACATTGT GGAGCCTATG ACATTGATTT ATGTCTCGGT CTCAAATGTT CTTGTAAAAA      60
AACTAAGTAT AGTTGAATTT TAAGTTAAAA AAATTGTTTT TGCAAAAATA AAATAATCCA      120

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TTTTAGGTTT TTCGCCTCTA AAAATCCTTG CGaTATTAGA GCGATGTCTA ATTATCAATA 240  
 TGATTGAAAC TAAGAACTA ACGACTAATA AAATATAGTC TTGAATGATA AGCGAGCCAA 300  
 5 TCACACAGCA AATTGCTGCA ACGATACTTG CTAAAGAAAC ATATTTAAAA ATCTTCAATA 360  
 CAATAAAGAA GATAATTGCA AGTATTAGTA AAAGTATCGG ATTGACTCCC AAGACGACAC 420  
 CTGCACTAGT TGCAACAGCT TTGCCACCTT GGAATTTTAA ATAAACAGGA TAAACGTGTC 480  
 10 CAAGTATAGC GAATAAGCCA ACAATTAAAC CATTTGTAAA AAAAGTACTA ATAGGGCCAT 540  
 CTGCGTGAAC TTGTAACCAT AAAGGGAAGA AAACAGTTAT GAACCCTTTG AAAATATCTA 600  
 GAAATGTTAC CAAGAATCCT GCAGGACGAC CTAATACTCT AAAGCTATTA GTAGCGCCAG 660  
 15 TATTACCACT ACCAAATTGT CTAATATCTT TTTTGAAAAA TAATTTTCCA ATTACGAATC 720  
 CACTTGGGAA AGCGCCGATA AGATAACTTA GTAGTAACAT GACGATTATC ATCATAAATA 780  
 20 TTACACATCC TTTAATATCT TAGGACTATT TTATCATA 818

(2) INFORMATION FOR SEQ ID NO: 749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:

ATATCCAATa ACTGTTcATT GTCTTGATAT TCCTTAAATG TTTcATAATG CTCATTAGAA 60  
 ATGACAATTT CAAGCAACCA ACCCGTGCCA CTTTCCTCTT TATTAAATTAT TACGCCATCT 120  
 35 TCTAATTCAT ATTCTATAAT TCTGCCGTGT TCATTCACAA TTTGAAACCT TACTGCTTTA 180  
 AAAGTTTTCA TATTCCCACA TCCCATTAGT TTAATATTTA TGATTTTTGA ATTATTTAGA 240  
 40 AGATTTAAGG TCATTTcATG ACTAATTTCT TTAAATATAA CAAATAACGA GATGCTATAG 300  
 CTATTAATTA TATAAAATTT GcCATTTTgA CCATTTTTAA GCTAGTAATT AAGATATAGG 360  
 cATAGGAGGT GAATCACACA CTACATGCTA AATAAAATCG TAATTGTCGG GAGcTGACGA 420  
 45 AAGACGCACA AATATTTGAA AAGGAGGATA GAAAAATTGC AACGTTTTGT GTTGCAACGC 480  
 ACCGAAATTA TAAAGATGAA AATGGAGAAA TCGTCTGTGA TTACTTATTC TGTAAGCAT 540  
 TTGGCAAGTT AGCTTCTAAT ATAGAAAAAT ATACTAATCA AGGTACATTG GTTGGTATAA 600  
 50 CTGGTCAAAT GAGATCAAGA AAGTATGATA AAGACGGACA AACACACTTT GTCACTGAAT 660  
 TATATGTTGA AACAAATAAA TTTATGTCCC CTAAATCCCA AAATAATGAA ATTCTCTCAG 720

TCCAATTATC CTAAACATCC TTAATATACA TTTAATCCAT CCTAAATTTT TTATAGATCT 840  
 AATTAACCTG AAATATACTC ACTTAAAAAC GACTTACATG ACCTAGTACT GTTGGTAAGG 900  
 5 TCGnCTTTTG GTGTAGTTTT CCTAATAGAn AATAGACnTA GGTGCCCCAA CCGATTACAT 960  
 AAAAAATTGC C 971

(2) INFORMATION FOR SEQ ID NO: 750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 832 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:

20 ATAGATTACT CTTTTGATCT GTAGATCCTA CTGTAACGAC ATTGTCCTATA GATGCAGGAA 60  
 CATCTTTCAC TTCGCCATTA CCTTGATATT CACGCTGTAA TTTTAGTTTC TGTGTCAT 120  
 TGACATCAAT ACCATCATT CCAGCTGCAG CAACAACGAT AGATTTTTTC TTCTGGCGT 180  
 25 AATTGATTGC TTTCTGTAAC GCATCGTATT CTACTTTTTT ATCTTTTCTA AATGTTTGAT 240  
 GGTCATTTTT GTCCAAAATA ATATAACTAC CAACACTAAT ATTAATGACT TGaTTTCCAT 300  
 CATTTGCAGC TTGAACAATC GCTTTTGATA CCCAAAGCAG TTCTGTTTTT TTACTIONACAA 360  
 30 ACACGCGATA CATTGTAAAT TTGTTATTCG GTGCAACACC TATTAACCTA CCATTAGCAC 420  
 TCGTTTGACC CGACACCATC GTGCCATGTC CTTTCCTATC ATTGACATCG TGAACATCAC 480  
 35 CTGTTTCCTC CGGTTTCAGTA CCTCTAAAAC CGTTTAAAGG TACTAAATTT TTAGAATCAG 540  
 TCGAGAAATT ATTTTCAAAA TCGTCATGGT TTTTCATCAC ACCTGTATCT ATGATTGCTA 600  
 TTTTGGTGTT AGCATGTTTT GGCAAATCAT CATAAGATGC ACCATTATTG GTTATTTTAT 660  
 40 TCATATCCCA TTGTCTTGAA AATAATGACT CATTGATGT TCTGTCTATT GTTTCTCGC 720  
 TAGTAATACA AGTTGAACAT GTGGCATTGA TATATTTAAAT ATCATTMTTA TAGTTTGCTA 780  
 AAGCATTAGC ATGCATTTTC GTCATTTTAA TCTGTGCCAC ATGGAATTCC GG 832

(2) INFORMATION FOR SEQ ID NO: 751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

	GTAATATCAA TCTCTTCATA AGCTGAATTA TTTTCATGCA CTTCTTGATG TGATGATTTG	60
	TCACGAACCG CTACAACATA CATTTTATCG TCTAAAATAA GTTGTTTATA TTTTCTAAT	120
5	TCATCAGGCG CTAAGTTGTA GCGTGATAAA ACTGCATGTT CACCATCTTC TCCTGTAAAC	180
	AGTTTAGTCA TTCTATCACT AAATGTTCCA CTTGTTGAGA TAAGGGAGAT TTCAGAGTCG	240
	TGTAAGTCAT TTAGGTGTAA TTTACTTTTA CTAATAATTG TTAGCTCTGA TTCTAAATAA	300
10	CCTTCAGATT TCTTTTGATT GATTACGTTG TATAATTTCG CAGTGTCATT TACTACAGTA	360
	ATATCTGCCA TAGTTGTCGC CCCTTTAAAA ATTTGTTTAT tTAATCTTTT ACCCTTCTTA	420
15	TnATAAGTA AAACCCTTAC ATTATTAAGT nATAAGTCTT CATTCGCATT AAACG	475

## (2) INFORMATION FOR SEQ ID NO: 752:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1019 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 752:

	GCGACACTTG TGAGTTCTCC AGCAGCAAAC GCGTTATCTT CAAAGGCTAT GGACAATCAT	60
	CCACAACAAA CGCAGTCAAG CAAACAGCAA ACACCTAAGA TTCAAAAAGG CGGTAACCTT	120
30	AAACCATTAG AACAACGTGA ACACGCAAAT GTTATATTAC CAAATAACGA TCGTCACCAA	180
	ATCACAGATA CAACGAATGG TyATTATGCA CCCGTAACCT ATATTCAAGT TGAAGCACCT	240
	ACTGGTACAT TTATTGCTTC CGGTGTAGTT GTAGGTAAAG ATACTCTTTT AACAAATAAA	300
35	CACGTCGTAG ATGCTACGCA CGGTGATCCT CATGCTTTAA AAGCATTCCC TTCTGCAATT	360
	AACCAAGACA ATTATCCAAA TGGTGGTTTC ACTGCTGAAC AATCACTAA ATATTCAGGC	420
40	GAAGGTGATT TAGCAATAGT TAAATTCTCC CCTAATGAGC AAAACAAACA TATTGGTGAA	480
	GTAGTTAAAC CAGCAACAAT GAGTAATAAT GCTGAAACAC AAGTTAACCA AAATATTACT	540
	GTAACAGGAT ATCCTGGTGA TAAACCTGTA GCAACAATGT GGGAAAGTAA AGGAAAAATC	600
45	ACTTACCTCA AAGGCGAACT ATGCAATATG ATTTAAGTAC AACTGGTGGT AATTCAGGTT	660
	CACCTGTATT TAATGAAAAA AATGAAGTGA TCGGaATTCA TTGGGGCGGT GTACCAAATG	720
	AATTTaATGG TGCGGTATTt ATTAATGAAA ATGTACGCAA CTtCTTAAAA CAAATATTG	780
50	AAGATATCCA TTTTGCCAAC GATGACCAAC CTAATAACCC AGATAATCCT GATAACCCTA	840
	ACAATCCTGA TAACCCTAAC AACCCAGATG AACCAAATAA CCCnGACAAC CCTAACAACC	900

CAATTAAGTT CGTCTAGATA AAATAGGAAG CAAAGTCTTA GCAACGTAAA ATATTTTGA

1019

(2) INFORMATION FOR SEQ ID NO: 753:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 753:

ATTCTTATCC CAGGTAGGTG nTTTACTTCT TATATTAGGT GCAATAACTC ATGCCACTCA 60  
TCTTGTGGCA CAACATGAaT CGCATTTTCA AAAATTGCAT GTCCTGCTTG ATCAGTCAAA 120  
CCGGCAGCAT GATCAAAATG CATATGTGTC ATTAGCACAT AATCAATATC CTTTGGCGTT 180  
AAATTATAAT TTGCCAAATC AGCAATTATA TGACTTTTCTT CATCTACTCC AAAATTACGT 240  
AATTGCTTTT CAGATAATTT ACCATTACCA ATACCTGCAT CTATAATCAA ATTATATTGA 300  
GCCGTTTGAA TCAAAATTGG ATGTGTCGGT AAATTGATTT GATTTCGTTT ATTGTCATTG 360  
TATTGCTTTG ACCACAACGG CTTCGGAACA ACACCAAACA TTGCACCGCC ATCCATTTTT 420  
GTATTGCCAC CATTTAGaTA ATGAATAGaT ATATCCCCGA TTTTCATAAC ATCACCTATT 480  
CTTTCGTAT TCGTTATTAC AATTAGCATG TGTTTATTAC ATCATATCAC TAT 533

(2) INFORMATION FOR SEQ ID NO: 754:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:

ATCCCCTGCA AGTGATAAAA TTATTGAAAA AGGCGACATG ATTACATTAG ATTTTGGCGC 60  
GTATTATAAC GGCTATTGTT CAGATATTAC TAGAACATTT GCTATTGGAG AACCAGATCC 120  
TAAACTGAAA GAnATATATC AnATAGTACT TGAATCTCAA ATGAAAGCAA TTAATGAGAt 180  
TAGACCTGGC ATGACTGGTG CAGAAGCTGA TGCCATTTCA AGAAACTATt TAGAGTCAAA 240  
AGGGTATGGA AAAGAATTTG GACATTCAT AGGACATGGT ATTGGTTTAG AAATCCATGA 300  
AGGGCCAATG CTGGCTCGTA CGATACaAGA TAAACTTCaA GTTAACAACT GTGTTACAGT 360  
AGAACCTGGT GTTTATATAG AAGGTTTGGG CGGTATAAGA ATAGAAGATG ATATTTTAAAT 420

AGCGTGTAAG ATGAGGAGGA AACTGAATGA TTTCGGTTAA TGATTTTAAA ACAGGTTTAA 540  
 CAATTTCTGT TGATAACGCT ATTTGGAAAG TTATAGACTT CCAACATGTA AAGCCTGGTA 600  
 5 AAGGTTTCAGC ATTCGTTTCGT TCAAAATTAC GTAATTTAAG AACTGGTGCA ATTCAAGAGA 660  
 AAACGTTTATG AGCTGGTGAA AAAGTTGAAC CAGCAATGAT TGAAAATCGT CGCATGCAAT 720  
 ATTTATATGC TGACGGAGAT AATCATGTAT TTATGGATAA TGAAAGCTTT GAACAAACAG 780  
 10 AACTTTCAAG TGATTACTTA AAAGAAGAAT TGAATTACTT AAAAGAAGGT ATGGAAGTAC 840  
 AAATTCAAAC ATACGAAGGT GAAGTATCG GTGTTGAATT ACCTAAACT GTTGAATTAA 900  
 CAGTAACTGA AACAGAACCT GGTATTAAAG GTGATACTGC AACTGGTGCC ACTAATCGG 960  
 15 CAACTGTTGA AACTGGTTAT ACATTAAATG TACCTTTATT TGTAACGAA GGTGACGTTT 1020  
 TAATTATCAA CACTGGTGAT GGAAGCTACA TTTCAAGAGG ATAATCTCTA ATTTGTTAAC 1080  
 20 AAATAGCTTG TATTCATAT ACTGATTTAA CGTAAGAAAT TCTAAATAAG TCTCATAAAG 1140  
 CTATTGCCTA AAATGATTAT AGGTTATATG CTGATATGAG GCTTTTATT TTTAAATAA 1200  
 TTTTAAAT ATAAACGAA TCGTC 1225

## (2) INFORMATION FOR SEQ ID NO: 755:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1265 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:

ACAAACAAAT CACTTAGTTA AAATTGACAG TGCATTATAT TCCGATAAAT TATTCAACAT 60  
 TGTAGAAAnn AGAATTGATA CACCAGATAT TGGCTATAAT ACAGTGGTTT TATCAGAAAA 120  
 40 ATGAGTGTAG AAATTAAAGG GATACCTGAn GTGTTGAATA AATTAGAATC GGTATACGGT 180  
 AAACAAGCAA TGCAGGCTAA GAGTGATAAA GCTTTAAATG AAGCATCTGA ATTTTTTATA 240  
 AAGGCTTTAA AGAAAGAGTT CGAGAGCTTT AAAGATACGG GTGCCAGTAT AGAAGAAATG 300  
 45 ACTAAATCTA AGCCTTATAC AAAAGTTGGT AGTCAAGAAA GGGCTGTTTT AATTGAATGG 360  
 GTAGGTCCTA TGAATCGCAA AAACATTATT CACTTGAATG AACATGGTTA TACAAGAGAT 420  
 GGAAAAAAT ATACACCAAG AGGTTTTGGA GTTATTGCAA AAACATTAGC TGCTAGCGAA 480  
 50 CGTAAGTATA GAGAAATTAT AAAAAAGGAG TTGGCCAGAT AAATGAATAT ATTAAACACC 540  
 ATAAAAGGAA TTTTATTATC TGATGCAGAG CTCAAAACAC ATATAAATTC TAGAATATAC 600



TATGATTTGC CTTCAGACTT TATGTCTGAT AAATATCTCA GTGAAGAATA CTTAATTCAA 720  
 ATAGATGTAG AATCTTCAAA TAATCAGAAA ACAATTGATA TAACAAAACG AATAAGATAC 780  
 5 CTGTTATATC AACAAAATTT AATTCAAGCA TCTAGTCAGT TAGATGCTTA TTTTGAAGAA 840  
 ACTAAACGTT ATGTGATGTC GAGACGATAT CAAGGCATAC CCAAAAATAT ATATTATAAA 900  
 AATCAGCGCA TCGAATAGGT GTGCTTTTTA ATTTTAAAGG AGGAAATAAG CAATGGCAGA 960  
 10 AGGACAAGGT TCTTATAAAG TAGGTTTAA AAGATTATAC GTTGGAGTTT TTAACCCAGA 1020  
 AGCAACAAAA GTAGTTAAAC GCATGACATG GGAAGATGAA AAAGGTGGTA CAGTTGACCT 1080  
 AAATATCACA GGTTTAGCAC CAGATTTAGT AGATATGTTT GCATCTAACA AACGTGTATG 1140  
 15 GATGaAAAA CAAGGTACTA ATGAAaGTTA AGTCcTGaCA TGaGTaTTTT CaATATTCCa 1200  
 AGTGaTgATT TAAaCACaGT TaTTGGaCGT ACTAAAGATA AAAATGGGTA CATCTTGGGT 1260  
 20 AGGAG 1265

(2) INFORMATION FOR SEQ ID NO: 756:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:

CATATACCCG GGTTCCAAGA ATCCTCTATC CATATGGTCC CCCAATTTTG ATTCCACCAT 60  
 ATTGTAAAT ATCACTTTCC CAGCCTACTT TTTTATnCAG TTGGGCTCTC TAAAATTGTT 120  
 35 TTGAAATCCA GGTGGAACAT ATTTCCAGTG TATGACCAAT CGAAACATTT GCACCAATAA 180  
 GGCCGCCAAT TTTTCCTGTA TCATCACCAG TAACATTACC GTTGAATCCA TAAGTTAAAG 240  
 40 TACTCATATA CTCTTTTGTA TCAATCGAAT TTCTTGGATA GTAATCAGAT ATTTGAGCTA 300  
 CTTCAATTATC AGGTAGTTGC AACTGTACCT TAAAGGCTGA AGGCCAGGCT AAACCACTTT 360  
 TGTTAGCACC TTCTTCGCTA TAAACTCTAT ATTGACCAGC AATGGTACCT TTCGTTCTAA 420  
 45 TAACTAGCAG TTTTTTATTA TGATTTTTAT CATCGATAAA ACTATAAAAT ACTTTTTTGT 480  
 GCATGCCATT TTCTTTATCA TAAGTGAATA AATCACCTGT TTTTACTGTA GTATTGCTTC 540  
 CAATATCTGT AGTACCGGTT TTAATATTAA TATCAGAATC TGCGGCATTA GCGACAGGAT 600  
 50 TCATTAATAT GGAACCTAGC AATAGTGTTG TTGTTACTGA GCTGACTATA CGTGTTTTCA 660  
 TTTTCATCAT CCTTCTATTT TTTAAACGA TTTGAGGAAA CAATAATCAA TATGTCAATT 720

GTAGCAACTG ATAAATTACT GAGTGATGAT GAGTGATTAT TTTAAGAATA TGTTTTTAAC 840  
 TTTTATTTAA AATTGAAAAG GAAGCATTTC AATTTTCGAGG GTTAGTCAAA GTTGAATAAA 900  
 5 TTCTTTATGA AACAAGGAAA AGACATAGCT AATTTtATTG ATTAATTTCT TTAAAACTAA 960  
 TGATTTGTTT GATTTAAAAA TGTAATCGAT TACAATATAA AAATACAAAT ATCTTAGAAT 1020  
 TAAATCAATT AATTAATAT TAAATAAAAA TTAATATAT ATTAAGTAGT GTAAATTAAT 1080  
 10 AAATAGAAAT AGAGAAAAAG GGTATTAATT A 1111

## (2) INFORMATION FOR SEQ ID NO: 757:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:

TATCTATTGT ATGTAACAAAT AGGTACATAA TATTTTtagG GTGGGTTATA TGAGCATAAT 60  
 25 TACAAGATTG TTTAATAACA GTGATTTTGA AAAATTAAAT CAACTATGTA AATTATATGA 120  
 TGATCTAGGT TATCCAACAA ATGAGAATGA TTTAAAAAAG AGACTAAAGA AAATAACGAA 180  
 TCATGATGAT TACTTCCTAC TGCTTTTGAT AAAAGAAAAAT AAAATAATTG GTTTAAGTGG 240  
 30 TATGTGTAAA ATGATGTTTT ACGAAwAAA TGCAGAGTAT ATGAGAATCC TTGCGTTTGT 300  
 TATACATTCT GAATTTAGGA AAAAAGGTTA TGGAAAGAGA TTATTAGCTG ATTCTGAAGA 360  
 ATTTTCTAAA CGGTTGAATT GTAAAGCmAT AaCACTAAAT AGTGGTAATA GAGATGanAG 420  
 35 ACATCTGCAC ATAACTATA TAGTGATanT GGGTATGTTA GCAATA 466

## (2) INFORMATION FOR SEQ ID NO: 758:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:

CGTACAGCAT AACCAAATAC ATATCTGCCA AAATCGCCAT ATGCCCCAGT TCCTCTTCCA 60  
 50 TATTCGGTTG TCATTGAGTT TTTAATTTTA TCGATAGAAA AATGTAAATG GCTATCTAAT 120  
 TTGTTTTTTA AAGATTTTAT GTAATCtCTA TATTTAAATT CGAATATTCT TTTTATAACC 180

AACTAATATA TwCAATTGTA TGCCTAGCAT AATCTCTCAT TAAAATATGA GGATATACCA 300  
 TTTCTTTATC AAATATtTCT TCATAAATAT AATTAGCAAT CTCTATATGT ATTtCACAAA 360  
 5 TGTCGATTTCG AAGTGTCGCC CCTAAAACAG rAGCATATAA TC 402

(2) INFORMATION FOR SEQ ID NO: 759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:

AAGTTACTCA ACAGCCATTT GACACGTCTC GATTAGAGCG ATTAGGTATA ACCGAGCGCC 60  
 20 AAATAAAGA CATGTATCGT TTATTAGGAC TAGCCAAATA TGAAGATCGA TTTGTTATTC 120  
 CAACATCACA CAAAGAAACC TATTTAGATA CGTATCACGC ACAAGGTAGT ACAGGATACA 180  
 ATTACGGCGG CGAGCATTTT GGAGATAACT GTGAAGGCTG TGGCGTTGCA GTAGGTTTCCAG 240  
 25 GGAAACTGG TCAAGAAATT TATAATGGAG AATTCTATGG AGGGATTTCC GTGGTTAATT 300  
 TCGATAATTT AAAAAATATC CAAGAAAGTT TGGGTnnn 338

(2) INFORMATION FOR SEQ ID NO: 760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:

CTCTATTATA TTTAGAGTTA TAGCTATTGC aGTTGTTTAT TTATTGAAAA TAAATGTACT 60  
 40 ATCATTAGtT TTAGCAAGTG TATTAGGCAG TTTgGTATCt AGGCTACTAT TATCTATTAT 120  
 TTTAAATTTA CCTGTGTGGG TAGTGTGTGT AAaCGCGATT CCAGGCGTAA TATTCACTTT 180  
 45 AATTGTAGcT ATTCCTTTTAT ATCTCACATT GAGAAAAAGA ATGGCAGTAT TACTAAGATA 240  
 ATAAATCAAA ACACGGTCGT CACAATTACT GTTGGCGACC GTGTTTTTACT AGCTATTTAT 300  
 TGTTTTTCACT TTCTTTTGTA TCTAACAATT TCACTTTGTG ATTTTCCCAA TCAATTTTCAT 360  
 50 ATGTTGaTTT AAATGTTCTA GTTTTAAAGT TTTTATAAT 399

(2) INFORMATION FOR SEQ ID NO: 761:

(A) LENGTH: 639 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:

10 GCATATnCAA AACAAATAGCT GCTTTAGGTG CGGGGGCTAT TAGCGTTATT TCTGCACTAA 60  
 CAGGAGGTTT AGTTGGCGCA GGTGTTGGTG GTTTCCTTGG ATCTATAGCT GCATCGAATA 120  
 TTGATACTAG TAAGGGAATA TATATAAAAT TAAAACTAA AAAGTATGCA GCCGGGGAAT 180  
 15 ACGTTCTGAC AGGAGAAAAA TGGGGATATC AGTAAGGGTG ATTTTATGGA TAGATTAAAA 240  
 TATTCACCTTA AAGTTGGAAT TTTAGCATT TATTATTTT GTACTTTTAA TTATTTAGTT 300  
 CCAATGCAAA GCAATGCTTT TTCAATAATT ATATATTCGG CAATTTTTGC TGTGTTACTT 360  
 20 ATGCTTTT TAG TTTATATATT TTTAGGAATT TTAAAGAAAT GACATGAAAC AAATTAGCAT 420  
 TGGCTATGAA GAAATCTATG GGGATAGAAT TTTTCATAGC CATTTTTTAA AAGAGCATGA 480  
 25 AGTAAAAAAT TGGAAAACCG TCAATCAAAT AATTGAAAAA GAACACTTGG ACAAAAATGA 540  
 ATATGnAAGC GGAACCGCCG TTATTTTTCT TTTGCAGGAT CGTTAGATTA GATTnCGGTT 600  
 GTATAGTATA ATGAAAAATA TTATAATAAA TTTATAAAA 639

30 (2) INFORMATION FOR SEQ ID NO: 762:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:

40 nTGTTTCGTTG TCTGGATCCA ACGTAAACAG TCGCTTCATC TAATACAATG ATAGGCGCAT 60  
 CTTTTAATAT CATTCCTGCA ATAGTGA CTC GTTGT TTTTC ACCACCAGAC AATTTATCTC 120  
 45 CCACTGTACC AACATTCGTA TCATATCCAT CTGGCAACTT TTCAATAAAT TCATGACATT 180  
 GTGCTAACTT GGcAGCTTTT TCAACTGCCT CATCCGTAGC TTCTGGATTG CCAAGTTTAA 240  
 TATTTTCTTT AAAAGTAAGA TTTAATAAAA AGTTATCTTG TCCAACAAAA CCAACTAAAT 300  
 50 CGTTAAGTTG TTTCGATTCA ATATCTTTTA TATTTATACC GCCAATCGTA ATTTACCTG 360  
 AAGTCACATC CCAGTATCGT GATATAAGCT TGGCAATGGT TGA CT TACCG CTACCAGaTG 420  
 55 CCCGACGAT AGCTGTGAAA TTATTTTCTG GTACTGTAAA TGATAAATGC TTAAAGACCA 480

GAGGCTTCTT AAATTTTGTT GACAATACTA ACTCTTCTAG ACTTAATATT TGATTCACCTT 600  
 CAGTTAATGC GTATTGTATA GACTTTAAAT GATTTACATA ATTAGTAAAA TTCTTAATCG 660  
 5 GTGCTACTAC ACCTAAAGAT AATACGATGC ATAGGAAAAA TTCCGCATAG TTTAATTGGT 720  
 TGATAGATAT CAAATACATG CCGACCGGTA AAATCCCTAA AAATGTTGAA GGTAATACAC 780  
 TAGCTCCTAA ATTCATATAC CCCCATGTAT TTTTAAACCA ATTCAAAGTG TGAATCTTAT 840  
 10 AATTATCTAC TG 852

## (2) INFORMATION FOR SEQ ID NO: 763:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:

CTCTTCATGC GTCATACGTT GTGTCGATTG ATCAGTTGTT TTGTCTAAAT CACTAGCTTT 60  
 25 AAATTTAGAT TGATTTGATT GACGTGTCGT AAATnGTTGT TCCTTTTGTT GGCGTTTGCC 120  
 TTTTTTCTT GATCTTATTA AAAATAAATT GATAACCCCA ACAATAATGA GCGCTAAAT 180  
 30 AATGTAGCTA ATAATGAAGG TCGTAGTCAT TTAATGACCC CCTTAATTTT TATGGATTTT 240  
 TACTTCAGCG TTCaTTCCaG GAACAACCTG TTTAGACGGT TcTGATTCTA GAGTGATTTT 300  
 AACAGGTATT ACTTGAGAAA CTTTAGTGTA GTTACCATCA CTATTTGATG ATGGCATTAA 360  
 35 TGAAAAGtTG CAGCAGTTGC TTTTCCAATA CTATCAACTT TACCTTTAAT AGAAGCTTTT 420  
 TGACCGTCAA TAGTCACATC AACATCTTTA CCTACTTCAA CATCTTTAAT ATCTTTTTTCG 480  
 TCAATATTTG CTGTTACATA TAAATCATCT AAATTGTATG CATAAGCGAT TGGGTTACCA 540  
 40 GCTTGCACCA TTGAACCTTC CATACCATCT AATTTGGCAA TTGTACCTTT TTGAGGCATT 600  
 TTAAGATCCA TATCTTTCGT TTCGCCATCT TGACCTTGTA CAGTAACAAT TGCTACTTTG 660  
 45 TCACCTTTAT CGAGTTTGTC ACCTTGTTTA ACATTAAGTG ATTTAATTG TCCAGATGCA 720  
 GGACTTGCTA TTTTAATTTG ATCGCCATTT ACTTTTG CAT TATCAGTTGT TACATAGCTT 780  
 GTTGTTTTAT TCCAAAAATA AAAGCCAGCA ATCCCAATGG CTAACnGTAC AACAAACCGTA 840  
 50 ATGACATTnA AT 852

## (2) INFORMATION FOR SEQ ID NO: 764:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:

	ACATATTCGA CATTCAATTT AAATTGCATA TAACTACATT AACCATTTCAT TGTGCAGCGC	60
10	CTGTTGTTTA GATGATCATT TATTGACTTT TTGCTCTTAT nCCAnGCAAT TTTTGTATTT	120
	ATTGCTTATA ATACATTTTA AGACAAATGT TTGTTTCAAC ATCGCATGCG ACATCATTA	180
	yTATTCATTT AAATTTATCC AGTTTCTATT TGTCTGCAAT TGCTGAAAAT TAAAGGAGCT	240
15	TATTTTAAAT AATGGAACAA ATTATCACTG AATTTATTAG CCGTTTTGGG TATGCAGCCA	300
	TTTTTATATT AATTTkATkA GAAAATGTAC TACCTaTCGT aCCATCGGgA AATTATTCTG	360
	ACATTTGCTG GTCTTATGTC TGTAAATCA CATTATCAA TTTTAACTTT ATTTATTATT	420
20	GCAACTATCG CATCGTTTAT AGGGCTGTTA ATTTTATATT ATATCTGCCG TTTGATTTCA	480
	GAAGAACGTC TATATCGTTT TATTGATCGA CACGGTAAGT GGATTAAATT GAAAAGTAAG	540
25	GATTTAAAGC GAGCAAATGA TTGGTTTAAA AAGTATGGCG TATGGGCTGT ATTkATCTGT	600
	CGTTTCATAC CTGTATTACG TGTaTGATT ACCATTCCAG CTGGTGkaAA CCGCATGAAT	660
	GTTGTGACaT TtACCGTTAT TTCATTAATA GGTACTACAA TCTGGAATTT CGGTTTAATT	720
30	TTACTAGGAC GCACTTTGAG CGATAGC	747

(2) INFORMATION FOR SEQ ID NO: 765:

(i) SEQUENCE CHARACTERISTICS:

35	(A) LENGTH: 820 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 765:

	TTTACCTTTT AACCAATCAT GCATTAATGC AATGTGTACT GTCTTAACAA ATGTTGCATA	60
45	TtCATCTTCT GCACTCCACT TTTTCAATTC CTGTTGATTa ATGGCATGTT TTTCTCCATT	120
	TTCCAACATA TTGACATACA ATTTATAATG TTTTCAACT GCCTGAATAA AAGCGAGTTG	180
	ATTTTTATTT AAATGTGATT TTAACTTTTC TAAATCTGAA TTAATAAAGT CTTCTATAGT	240
50	CGAATAAGAC ATATCTTGGT ATTCAACTAC TGCATTAATT TCATCTAATA ATTGCGATTG	300
	TGATTTTAGC GTTATATAAC TCTCGTCTCC ATAAGATATT TCTGTAGTAG CTGCTGTAGT	360
55	AGGATTTGGA GAACTGACTA AAATATGCTC GCCTAATAAT GCATTTATCa AACTACTTTT	420

TGTTCGTGG ATATCTTGCT TTGTACGCTT GAACAAAGGC ACATCCGAAA TTATATCAAG 540  
 CGCTTTTTGA ATATCTATAG ACATATTTGT TGTAGCTGTA TTTTGATTTA GCTGCTGATT 600  
 5 ATCACGATTA TCCTGAGCAT TATCAGTAGC CACTTGATAT GTTGTCTCTT GTCGACCTAT 660  
 TAATTTATCT AGAGATTCAT CTAAATGAAT ATAGTAGTGA CGATAATTCT TAGTCGTCAA 720  
 TGA CTGACGC AGCTCATTTA ATTCTGTATA ACGTTGATAT TCTTTTAAAT CATCACTTTC 780  
 10 TTCTGTTGGn AATTCATCTG CCTGCACATT TTCTATnATT 820

(2) INFORMATION FOR SEQ ID NO: 766:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 672 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 766:

TCAACATGAC ATTAATTTAA TAGCGATGCA TACAAATTTA GATGTAAATC CGTATGGTGT 60  
 25 CAATATGATG TTGGCGAAGG CGATGGGTTT GAAGAACATT TCAATAATAA ATAATCAACA 120  
 AGATGTATAC TATAAAGTTC AAACATATAT ACCTAAGGAT AATGTTGGAC CATTTAAAGA 180  
 30 TAAGCTTAGT GAAAATGGAT TAGCGCAAGA AGGTAATTAT GAATATTGTT TCTTTGAAAG 240  
 TGAAGGAAGA GGGCAATTCA AACCAGTTGG TGAAGCTAAT CCAACAATAG GACAAATTGA 300  
 TAAAATTGAA TATGTAGATG AAGTTAAAAT TGAATTTATG ATAGATGCAT ATCAAAAGTC 360  
 35 AAGGGcTGAG CaATTAATTA AACAAATACCA TCCATATGAA ACACCGGTAT TTGATTTTAT 420  
 TGAGATAAAA CAAACATCCC TTTATGGACT TGGCGTTATG GCAGAAGTGG ATAATCAAAT 480  
 GACATTGGAA GATTTGCGAG CTGATATTAA ATCTAAATTA AATATCCCAA GTGTCCGTTT 540  
 40 TGTGGGTGak TCTAATCAGA AAATTAAACG TATTGCaATT ATTGGTgGTT CAGGTATTGG 600  
 ATATGAakAT CAAGctGTCC AACAAAGGcGC AGATGTCTgT TACGGTGATA TTAAACATCA 660  
 GATGCCTAGA TG 672

(2) INFORMATION FOR SEQ ID NO: 767:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 403 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GAAAAAGTTA AACCTACTGT AACTACAACA AGcmaAGTTG AAGACmATCa CTCTACTAAA 60  
 GTTGTmAGTA CTGaCACAAC AAAAGATCAA ACTAAAACaC AAAC TGCTCA TACAGTTAAA 120  
 5 ACAGCACAAA CTGCTCAAGA ACAAATAAAA GTTCAAACAC CTGTTAAAGA TGTTGCAACA 180  
 GCGAAATCTG AAAGCAACAA TCAAGCTGTA AGTGATAATA AATCACAACA AACTAACAAA 240  
 10 GTTACAAAAC ATAACGAAAC GCCTAAACAA GCATCTAAAG CTAAAGAATT ACCAAAAACT 300  
 GGTTTAACTT CAGTTGATAA CTTTATTAGC AcAGTtGCcT TCGCAACACT TGCCCTTTTA 360  
 GGTTcATTAT CTTTATTACT TTTCAAAGg AAGaaTCTAA ATA 403

(2) INFORMATION FOR SEQ ID NO: 768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:

TTCAATGCTC GTTT TGCTTG CGTTAGTAAT TTCTAACATA TTCATTcACA TTTTGGAGCC 60  
 TAAACTATCA ATCACCACtC AAATCATCAT CGTTTTGATT TTAATTGAAG CACTAATTGG 120  
 30 ACTGCGTTTC TTGAAAGCGT ACGATGTtAA GCGTGgCAAA GATAAAGAAA ATAAGAAAAA 180  
 TAGTAAGGAT TTCGTTAAAC TAAAATCAAT TTTAGTAGCA ATTTTATTtA CATCATtGGC 240  
 GCTGACAGCA GGTACTGTAG CTGATATATA CGGTTTCACT GACTTAGGAA ATACTAGAAG 300  
 35 TGATTtAATC GTTTGGAGCA TAGGTGGTAT TATATTtGGC CTCGTATGTT ACACAATGGA 360  
 AGATAAAAGA TAACGATAAG GAGCTGGCGA TTATAAGCT AGCTCCTTTT TTAACtTaTA 420  
 TATGTAAAGA aCTaTCCTAA GGGkTTTTAA TCATATGTCA ATAATTtCTA TAATACATTA 480  
 40 TTA 483

(2) INFORMATION FOR SEQ ID NO: 769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:

ATTATATGTC TGATGTATTT CATGTCGTTA AAAATAAAGG TACGGAAGAT TTAAAGAAG 60



GGATGATGCT TGAAGGTGAA AAAATCAAAG CTTTTTATGA AGATATGCCA CCGTATCAGA 180  
 CTGTCAAAAA AGGAACGATA CAAATTAAGC GTGATGGCAC ACCTATTATC CTATTAAATG 240  
 5 TCATTATACG CTnGTAGCTA CCCGCAAATC GGTACAATCG CAGTTATCAT TTACGAATTA 300  
 GCACAAAACC GCAGGATCAC GTTGAATTCC ATTATAGTAT TTACGGCTGA AGACTGTAAG 360  
 nTAnACTGGT AACCATATCA TGGATGATTG ATCATAGATG 400

(2) INFORMATION FOR SEQ ID NO: 770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:

ATCTCTTCTA CTTCCTTTTAC AAATTGAGAA CGTCTTAAAA TGGCTTTTCAC ACGGGCAACA 60  
 ACTTCTCTAG GTkAAAAAGG CTTAGTCATA TAGTCATCGG CACCTAATTC TAAACCTAAT 120  
 25 ACCCGATCAA ATTCATCATT TTTCCGCCGT AACATTAATA TAGGGACTAA ATTTTTATTT 180  
 GTTCTTACAG TCTTACATAC GTCAATGCCA TCTTTTTTTAG GTAGCATAAC ATCTAAAATA 240  
 ATTAAATCTG GCTGTTCACT TTCTACCTTT TCTAAAGCCT CATCACCATC AAATGCGACA 300  
 30 ACAACTTCaT AACCAGCTGk TTCTArGyTA TATTTAAGTA ATGgTTaCGa TTGaATGtTC 360  
 GTCATCTACT wCCaACACTT TTTGCGACAT GgATGCCTC CCTAACttAk AATTATATTT 420  
 35 cATTATAACC GAACTATTTA TAAAAATAmC ATCCTACACA TTATCTTTTAC ACATTTTTTTA 480  
 CATTACTTTA CATATAAATA AAATACTTCT TATATTTCTT TCTmTCATTT GCATGACTTA 540  
 CTCTGGGACA ACGAAATAAA TTTTGTAATA ATAGCATTTT TATCCCACTA CCTATGCATG 600  
 40 AGTTTTACTC ATTTATTCCT AAGCTTATGT ACATATTCGC TTTGTCTAAT GTGTAAGAAA 660  
 CACTACATAA TCAATCATTG GTGACTCTTT ATTATTTCTA TCCTGTTGCC AaCTTCAATT 720  
 CATTTAAGAAA GGCGAACCTA GCAATTAAAG 750

(2) INFORMATION FOR SEQ ID NO: 771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

	ATTTAATTAT TATTTTTCCA AATCAATACG ATATAATTTT ATGTTTTTAT CTTTTGGTGC	60
	TGaGGCAAAT TGATAAGtCG TTTTGCCTTT TTCAATATAT CCAAAATTAC CAGCAACTTT	120
5	GCTATATTCC GTATGTGTTA CTGCTTTGCC AACATAATTT TTAACAGCTT GATATGTTGG	180
	ACCATTAGCA TCATTATACA TCATTGAAAT ATGAGTTACT TTACCATTGT TTTTCTTACC	240
10	ATCAGTAGTT ACTAATAACA TACCTTTTTT AGTATGGAAT TCGTAATAAT GTTCAGTTCC	300
	ATCTTCATTG TAAGAATACA TCGGATTTTT GTACTTAGTT AAAACATCTT TAATAGATTC	360
	GCCAATTTTC ACATTTTCTA ATGACTGATC ACCCTTAATT AATTGTTTAA CAGTATCAAT	420
15	AGAGTTGCCA CTGCTGCTT CGGCACTAGT GTTCACTAAG CCTACTCCCA TTACAACAGA	480
	ACATGCAATT ATACTTGCCG TTAGTAGCTT TTTCATAAGC ACTCTCTCCT TTTATTTATA	540
	TCGTCTTG TG CTCACAACCA TTATACAACA ATCATTCTA AAACAACAGT CATATTACAA	600
20	TTATATTACA AATAATAATT ACTACTTTTA TATTTCACTT ATCACTAAAA ATTAAACATG	660
	CTTTTCATCG TGATGTTTGT TGATAAATGC AGCTGTATCT TCGACGAATC TTTCTTGCTC	720
	TTcAACAAAT GGAATGCAC TTGATTCTTG ATATACTTCA AAGTCCGCAT TTTGGATTAA	780
25	ATCAGCTACT TCTTTAGCTT CTAATCTTGT TGTTCCTTCA CCGAATTCTC CTGCAATAAT	840
	TTTTGTGCGT ACTACGACAT TTCTATAAGT TTGAGAAATA TCAGCGTTTT TGAATACCTC	900
30	TTTAACTGCT TGAATTTCTT CTTTAGTTGA TATTTCAATT GTATCTACGA CATGTTTGAG	960
	GAATCGATTc ATTTTTCTCG GACGATAATA CTTACGCTTA TTTAAAAATT TAwCyTGtTT	1020
	TTCaGGATCC CaGTTtCGAA TAATATGGGC ATaTTTTCTA AATAAACGTT CTTCCGGTAA	1080
35	TTCACCTTCA ATAGATGTTG GATTTACCAA CGTAAGTGAT GATGTAAATT CAGGATAACG	1140
	TACTGAAATA TCCGCACCAA TGATTCCACC CATTkCATGG cATACAAATG CAACTTCTTC	1200
	AATATATAAA TATTTAAGTA ATTCAACAAT GTCATCAGAA AAATCTTTTA TTTCAATGTG	1260
40	ACGAGGTTTA TCAGAATAGC CATGTCCACG TAAATCAATT AACACAACCTT GAAATGATTT	1320
	TGCTAATTCT GCTGCTAATT TATTAAACAC AGAATAATTA TCAAGTACAG TATGAATCAA	1380
	TACGATAGGA TAGCCTTCAC CTAAnGTACT GTAATGTATC GATGTTCCAT CTTTTCTAGT	1440
45	AAATAGATCC ATAATTTTCT CC	1462

(2) INFORMATION FOR SEQ ID NO: 772:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 704 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:

5 ATTATTATAA GGAGTTATCT TACATGTTAA ATCTTGAAAA CAAAACATAT GTCATCATGG 60  
 GAATCGCTAA TAAGCGTAGT ATTGCTTTTG GTGTCGCTAA AGTTTTAGAT CAATTmGGTG 120  
 CTAAATTAGT ATTTACTTAC CGTAAAGAAC GTAGCCGTAA AGAGCTTGAA AAATTATTAG 180  
 10 AACAATTAAA TCAACCAGAA GCGCACTTAT ATCAAATTGA TGTTCAAAGC GATGAAGAGG 240  
 TTATTAATGG TTTTGAGCAA ATTGGTAAAG ATGTTGGCAA TATTGATGGT GTATATCATT 300  
 CAATCGCATT TGCTAATATG GAAGACTTAC GCGGACGCTT TTCTGAAACT TCACGTGAAG 360  
 15 GCTTCTTGTT AGCTCAAGAC ATTAGTTCTT ACTCATTAAC AATTGTGGCT CATGAAGCTA 420  
 AAAAATTAAT GCCAGAAGGT GGTAGCATTG TTGCAACAAC ATATTTAGGT GGCGAATTCTG 480  
 CAGTTCAAAA CTATAATGTG ATGGGTGTTG CTAAAGCGAG CTTAGAAGCA AATGTTAAAT 540  
 20 ATTTAGCATT AGACTTAGGT CCAGATAATA TTCGCGTTAA TGCAATTTCA GCTAGTCCAA 600  
 TCCGTACATT AAGTGCAAAA GGTGTGGGTG GTTTCAATAC AATTCTTAAA AGAAATCGAA 660  
 GAGCGTGCAC CTTTTAAAAC CGTAATGTTG ATCCAGTAGA AGTA 704  
 25

## (2) INFORMATION FOR SEQ ID NO: 773:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:

35 GACCACGACA CCACAAGCTA TGAAGAATGC CyTTGTTAAG CCGCctTTGa ATtGCATAGA 60  
 GATGAAAATA CCAATATTAA TAAAGAAGTT ACAGAAAATA CCTTTTGTA AAATATTCAA 120  
 40 CCATGTTGAA TCAACAGTCT TTTTCTGAAC TAAAGCTGTT AAAGCTTGTG TCATTTTCAGG 180  
 TGTCATGACA TGCGCAAATT TCATTAAGAA AAATAACACA AACCACCTA AAATATTTCC 240  
 45 TAAGAAACAA TATAATAAAA TCCAAGTCAT CTTCTTAACA GAAACGACTT TATAATACCA 300  
 GCCTACTGTA AAGTACATGA AGTTACTTGT TAATAATTCA GAGTTAGTTA ATACAATAA 360  
 AATCAAACCT AACTTAAACG CAATGGCTCC CATTAATTG ATAAGTCCAT CTACGTGAGT 420  
 50 ACTCGCA 427

## (2) INFORMATION FOR SEQ ID NO: 774:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774:

AGGTGAGCAT TATTAAATAT TGCCAAGAAA TCAAAACTAA AAACATATGCA AAAGATGTAG	60
ATATATTATT TATTCTTGGC GGTGATGGCA CGGTTAACGA ACTTATAAAC GGTGTTATGA	120
CACATGACCT TCAACTCCCT ATTGGCATT TACCAGGCGG TACTTTTAAT GATTTTACAA	180
AAACGCTAAA TATAGCACCT GAATCATAAA CAAGCTAGTG AACAAATGGA TTTCTGCACA	240
AGTTGGTACA TACGATGTAA TTGAAAATGA AATGAATCAA TATGCACTCA ACTTTGTGGG	300
CTTAGGTCTC ATGTTCAAAA CGCGGAAAAC GTACAAGAGG TTCAAAAGAT GTATTGGGTA	360
AATGGAGTTA TATTGGGTCC ACCGTCCAAA ACnCGGCnAA	400

20

(2) INFORMATION FOR SEQ ID NO: 775:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 484 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 775:

AATTATTCCT CAATAGGAGC ATTACCCGCT CTCTCACCAA TTCCCAAAAA TGTAGTTTCT	60
ATTTGCTTTG CACCATTAA AATTGCAGCT AATGTATTTG CAGTAGCCAA CCCTAGATCG	120
TTATGACAAT GAGCAGAAAa AATTATGTTA GAATATTTTT TTACAAAGTA ATTAAAAATA	180
TCTCCGTATT CTAATGGTGT CGAACATCCT ACAGTGTCCG CAAATGTAAC TGTTCCTAACT	240
TGATATTTTG AAATAATTC CATGTATTCT TTCAATTTTT CTCTAGAAGT CCTTGTTCCA	300
TCTTCAAAAC AAATATCTAC TCCTTTTTTA TCTTTCTTTA ATATATCCAA GCAGTCTTTG	360
ATTTTCTGAA TATAATATTT ATTTGAAAAA TTAAGCTTTT CTTTATATG CAAGTCAGAT	420
ATTGGCAATA GTATTTtTAC CACTAAATTA TGAATTTtCA ATtTGACTAT TTTTgGTATG	480
TCnT	484

45

(2) INFORMATION FOR SEQ ID NO: 776:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 788 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:

5 CGCAAGATGA AGTTAAAGAA CTTAATCGCT TATTAGGTAA AGTCATTCAT GCATTTGATG 60  
 AAACAAAGGA AAAATAATTA ACTTTTGTCA TGACAATTAA AGTAATGTTT AGAATTTATT 120  
 AAGAATAGAA AAACAATTAG CACGCGTAAC TTGTTAGTAA AAAAAGTCTGCT TGAAAGGTTT 180  
 CTTAGCCTAT CAAGCAGTTT TTTTATGCAT TATATTGAAT CATATTCCAT AAAGCACCTT 240  
 10 GATTAGCTAG TAATTGTTGA TAGTTTCCCT TTTCAACTAT TTTACCATT TATCATCACAA 300  
 TGATGGTCTC AAAACGTGAC AATAAAGTTA AATCGTGTGT AGCAACAATT AATGTTTCTG 360  
 CATGTGCTTC AATTAAATCC ATAACCTTTA AACTATTTTG TTTATCTAAT GCAGTTGTTG 420  
 GTTCATCTAA AATCCATGTT GATGCAGTAT CTTTAAATAA CATCCTCGTA ATCGCTAAAC 480  
 GCTGAATTTT TCCGCCAGAT AATGTATGAC CATCTAAGTC AATTTGACGT TCTAGTGCCA 540  
 20 AATGTTCTAA ATCTAATTGC TTAAATATTG CTTGCACCGC TTCATCTTTT TCATCGGTAA 600  
 ATAAATTTTG ACGTATTGTA CCATCAAATA ATTGTTGAGA TTGTAGCAAG ACATTTAACG 660  
 ATTCAAACCT ATCTTTGTCA TCTATTTCAA ACATATCCAT ATTTTCGAAA CGAACAGAGC 720  
 25 CACTATCTAA TTGATATAAC CCTGCCATAA TTTGTAGTAA TGTACTTTTT CCTGAACCAG 780  
 AAGGACCC 788

## (2) INFORMATION FOR SEQ ID NO: 777:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

40 TTACAAAAGA AATGCAACAA AATTTTTGAA TCATTACATT TTTTATAAA AATTTCACTT 60  
 TAGATTCACA ATAATTACTT ATTTTGTCAA TTTATTTAAT GTCAATATGT TGATTAATTA 120  
 ATAGTGTTGT CTAATGTATA TAATATTTAG GTCATCGTTA TAGTCAACAA TAATAAGGTA 180  
 45 TTTGAGTTG AAATTTATCT TATTATTTTT CCACTTTTAC GTGCTATCCC ATTACACAAA 240  
 AACAAATAAG TAAAGATATT AAGTACAAA AAGTGGAACA CCTTGTAGAT GCTCCACCTC 300  
 AATTATATTA AGTTATATTA TTTTGCTGCT TGGTATAATT CATCAACTTT TTTCCAGTTA 360  
 50 ACAATGTTCC AAAATGCAGT CATATAGTCT GGACGTTTAT TTTGATATT CAGATAGTAG 420  
 GCATGCTCCC AAACATCAAA TAGTAAGATT GGTGTTTTGC CTTCTGTTAA TGGATTATCT 480

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	GATCCAAATA ATGTTGTTGC TTTATTTGCA AATTCATTTT TAAATTCATC TAAAGTGCCC	600
	CACTGCGcTT TGATGTCATC TATTACGCCA CCTTTTTCTT CAGAATTAGG TGATAGTATT	660
5	TCCCAGAATA ATGAATGGTT AAAATGACCA CCGCCATTAT TACGGACTGA CATCCTCATC	720
	GCTTCCGGTA CTTTGTCTAA GTnAGCAATC ATATCCGCTA GTGATTGATG CTCTAACTCT	780
	GTTCCTTCAA CTGTTGCGTT TAATTTGTC ACGTACGTAT TGTGATGTTT GTCGTGATGA	840
10	AACTCCATTG TTCTTTGATC TATATATGGT TCCAATGCAT CATATGCATA TGGTAAATTT	900
	GGTAATTTAA ATGCCATAAG TATATTCCTC CTTTTATGAA TATACTTTTA TAATAATTAA	960
	TTTTGGGTGT GTTTTGCAAT AATTATTATT TATTTGTTAT ATCCAATTAT ATAAAATTTA	1020
15	AATATTGCAA ATTGATATAA TATTTAATAT TGAATGCAAA AAGGCATTTA ACTGCTTTTG	1080
	TTTCCCGCTT TTAAAGAGAA TTAAAAAGA CAACTTCCAT TTTTCAATAA GAAATTGCCT	1140
20	TTTCT	1145

(2) INFORMATION FOR SEQ ID NO: 778:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 902 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778:

	AAAAGAGGnC CAATATTATC AATATACGGC CGGAAGATTC CCTTTTTCTT CTCCACTTAC	60
	TAAGCCCATC AATGGTGTAT GTTATCaATT GGTGCTATCC GCATTAAATA ATTATCTTCA	120
35	ATTGTGGTAT CAAAGCTATT CGCTTTTTCT CCAATAATGT CTTTACCATA TTTATTGAAT	180
	GCACCTACTA AAATCAACAT AAATGGAATT AACAAGGTTA CTACAATTGC CATTCTTATA	240
40	AATTGTGGTA TATAAGAAGG TCGCCAATTT AAAGCTTTAA TACCTTCTTw TCTAAATGGA	300
	GTTTCTATAA AGCGATATGA TAGCTCTGCA AATATAATTG TTAAACTTAT ATCTATAAAG	360
	TACACATATA CAGGTATCTG TCCGTCTACA TAGTAACTAT GTACGAAACT AATTACTGCA	420
45	AAATGCCATA AATATAAACT ATAAGACCTT TTCCCGATAA ATACTAACAC TGGATTTGAA	480
	AATATCTTCG CLATCCATGT AGATGGATGA ACGACACTAG CAATAATAAA TAACGTTAAT	540
	ATGGATATTA AATAGAAACC ACCATCATAT ATCCAATTCG TCTCATCATT AATAATGAAA	600
50	AATAATAATA TAAGTACTAT AAATGATAAA CTACCTATGC TATCAATAAC ATATTTTACA	660
	ACTTTAGGTG GATCATTTTT CAATTTAAAC GGTGGCCATA AAAAAGCTAA AATAACACCC	720

ATACTATAGA TAAACATCAT TAACCCTAAA GAAATTATTG ATACTCCCCA AAAAATAAAT 840  
 CCTATTTTGT ATCGCTTTTT AATTGTTAAC AATAATGTAA CCAAATAAC TGGGAAAAAT 900  
 5 AT 902

## (2) INFORMATION FOR SEQ ID NO: 779:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:

GGAATTAGTT TCCTAATGAT CAAACCATAA CCATTAGCTT TTAATGATGT TACGCCTTTA 60  
 AAGATTAGAG GATGATGACT AATAATAGTA TTATAACCTT TTTGATTGC TTCATTTACT 120  
 ACTTCCAACG TACAGTCTAA TGCTGTTAAA ACACCAGTAA CTTEAACATC TTCATCACCT 180  
 ATTAACAATC CTACATTATC CCAAGATTCA GCAGTACTAA ATGGCACATG ATGATCTAAC 240  
 AATGTCATTA AATCAGCTAT TTTCATACTA TAACACCCTT TCAATTACaG CAATTTTCGTC 300  
 aTTAATTTGa GCTAAAcGTT GakGAKGTTG TTCAGTAwTG AGtTTCGaTT TAAtATGATA 360  
 AAgTGCyTct AACTCtCTTT GcCATTTtTT TATAAAATAT 400

## (2) INFORMATION FOR SEQ ID NO: 780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:

GTTCTGTTT TAACATCAAT ATCTATCTTT TTAATATCTT GAACATAAAG CAGATTCAGT 60  
 TGGCTAATAT TTGAATTTAT GTTAATCACT TTTTTCGTTT CATTTTTTAAA ATGTAAGTGT 120  
 TAAGTnGCTT TTTTGCATA TTTTAATTCA CGTCCCCGA TACCTCTATC ATGCTTCAAT 180  
 ACTGaTTTAA CTTTTTTAGA GATATCTTTG TAGCCTACAC GTGGGTCACC TGTAATTTTT 240  
 AAATCTGaTA AAATTGGTGT TGATGTGCCA TTTACTGCAA TTGTGTATGG TACATATCTG 300  
 TCTGCTTTCG CTTTAGTTCC TGTTTTAACA GTAATTTCAA TTCTCTTAAC ATCTTTCGCA 360  
 TGAACATAAGT TTGCTGTGTA ATTTTTTGAA TTCAACTGTA AGATTCTTTT ACCACCATT 420

CTATCATGCT TCAGTACTGA TTTTATTTGA CTAGTTAAAT TTTTGTAATT TGTCCAAGGT 540  
 TTATnTGAAA ATGAAAG 557

(2) INFORMATION FOR SEQ ID NO: 781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:

TTCTGATAAC ACAACTTTCT TGGACCAAGT GACAATGGTA AAGTTGATAT TCTCAAAAAA 60  
 TATATTTTAT TGAAAAGGTA ACTATATCGA CCGCTCTGTG CGACTTGCTG TGTAGAAACA 120  
 TCAAGCCCAG CTTGAAACTT CATATAAACT AATAACTTTT GATAAATGCT ATTCCCAATT 180  
 TGTTCACTACT GCTCCAAGTT ATCATTAAAT CTAAATTAA TACTTACTTC ATTTTAACT 240  
 GGAATAAAAT GTACATCACT CGCTTTTATT TCTATCGCTT TATTAATTAT TTCTTGAAAT 300  
 AGAATCTTCA AAAAAACACC TCCTACATAT AATCACGTAG GAGGTGTTTT TATTACTTCA 360  
 ATTTAACCGT GTAAAAATGG ATTTAATTGT TCATCATCAA CCGTCGTATA TGGACCATGT 420  
 CCAGGGAATA AAGGTAAATC GCCTTCTAAT TCAAATATTT TATCTTGAAT AGAAT 475

(2) INFORMATION FOR SEQ ID NO: 782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

ATGAATATCG GTGCAGGACG TATCGTTTAT CAAAGTTTAA CTCGAATCAA TAAATCAATT 60  
 GAAGACGGTG ATTTCTTTGA AAATGATGTT TTAAATAATG CAATTGCACA CGTGAATTCA 120  
 CATGATTCAG CGTTACACAT CTTTGGTTTA TTGTCTGACG GTGGTGTA CAAGTCATTAC 180  
 AAACATTTAT TTGCTTTGTT AGAACTTGCT AAAAAACAAG GnGTTGAAAA AGTTTACGTA 240  
 CACGCATTTT TAGATGGCCG TGACGTAGAT CAAAAATCCG CTTTGAAATA CATCGAAGAG 300  
 ACTGAAGCTA AATCCATGAA TnAGGGCATn GGCCATTTGC ACCGGGGCCT GGCCGTAATA 360  
 AGCCAA nGGA CCGGGCCAAC CGTTGGGACC GGAAGAAAA 400



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 810 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:

GATTAAATGTA CTCGTGTACA TAACGTTTGA AGTATGATAA ATAGATATAG AAATAAAGTC 60  
 ATATGTGACA TCAATTAAAT GATGTTCAAA TGACAAGATA CAATAGAGGA ATGTTTGATA 120  
 TAAAAACGCT TCATATAAAG GTCGAGTCAA TATATGATAC GACTTTATAT GAAGCGTTTT 180  
 ATTTGCTATG AGCTAGTATA TTTTATAATA ATTTTCTAT TTCTCTTCG ATTTGAACAG 240  
 GTTTTTTTTG AGGTGCAAAT CGTTTAAACAA CGTTACCyTC GCGATCCACT AAAAAGTTAG 300  
 TGAAATTCCA TTTGATTTTC TCATTAAAGA ATCCGTGTTG TGCCGCAGTC AAATATCTAA 360  
 ATAAAGGTAA TTGATGTTCC CCTTTTACGT CTATTTTTTG ATGCATAGGG AAGGTAACAC 420  
 CATAGTTTAA TTTACAGTTT TGAGCTGCTT CTTCGCCTGA ACCAGGTTCT TGGCCACCAA 480  
 ATTGATTACA AGGGAAACCT AGAATTACAA ACCCTGATC TTTGTATTTT TCGTATAATG 540  
 ATTGCAAACC TTCAAATTGT GAAGTAAAGC CACATTCGCT AGCTGTATTA ACAATTAGCA 600  
 TAACGTCACC CTTATATGCA TCTAATTTGT AAGTAACACC TTTATTTGTT TCTACTACAA 660  
 AATCATAAAT TGTCTCCATT GTATCATCCT TTCGATTAC TTAAaATGTA CCaCAAAATC 720  
 GTGTAAtAGT CTkTACTArA ACTCTATGAT AGAATACTTT GAGTAGGATT TTATTAAGGA 780  
 GATGTATAAC ATGGnTCAGC AACAAATTCA 810

## (2) INFORMATION FOR SEQ ID NO: 784:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:

AAATTCATTG CAGAAAACAT AGATAAATAA ACAAATTGAC TTAAACGAG CGTTGCAACA 60  
 TATCTCGAAT TGTAAGGAG CTTGAAAATG AATAAAATA TAGTCATTAA AAGCATGGCA 120  
 GCATTAGCCA TTCTAACCTC AGTAACTGGA ATAAATGCTG CAGTCGTTGA AGAGACACAA 180  
 CAAATAGCAA ATGCAGAGAA GAATGTTACG CAAGTTAAAG ATACAAATAT TTTCCATAT 240

ACCAATAAAC ATGTATCAAA AGATTATAAA GTTGGCGATA GAATTACTGC CCATCCAAAC 360  
 GGTGACAAAG GAAATGGTGG TATATATAAA ATTAAAAGCA TTTCTGATTA TCCGGGTGAT 420  
 5 GAAGACATCT CTGTCATGAA TATTGAAGAA CAAGCAGTCG AACGTGGACC AAAAGGCTTT 480  
 AATTTTAATG AAAATGTCCA AGCATTCAAT TTTGCGAAAG ATGCTAAAGT TGATGACAAA 540  
 10 ATTAAAGTTA TTGGTTACCC ATTACCTGCT CAAAATAGTT TTAAACAGTT TGAATCTACA 600  
 GGAECTATAA AAAGAATsAA AGACAATATT TTAAATTTTG GATGCCATAC ATTGGAACCC 660  
 GGGGAATTCA GGGATCACCA GTTCTAAATT CTAACAATGA GGTTCATAGGT GTGGTGGTAT 720  
 15 GGGCGGGTAT TGGGAAAAAT TGGGTTCTGG AATAATAATG GGTGGCCGTA TACTTTACGC 780  
 CTCCAnAT 788

## (2) INFORMATION FOR SEQ ID NO: 785:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1023 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:

CAATATTTTA GAAACAaTAA TTAAGTTGCG ATGAACAAAC TATTAACAAT AATCTTGAGT 60  
 ATTATATTTA TCTTAATTAA TAATATATTT ATTAAAGATT ATGTTACTTC CAACTTTCAA 120  
 AGTAGAAAAA CGGTATAAaT TGTTGATGGG TGTTTATTGA TAACTGCAA AAAATACAGC 180  
 35 CTACAACCAC ATAGATTGTA GACTATATTT AAAATAATAG GTATTTATCA TATCTCGTAA 240  
 ACTTAGTGCC AATTTTTATA CTCGTGGTGC TGGTAAGCTA CCCTTAAATT CAGGAACGTA 300  
 GTGTGTaGGG CTATAACTTG GAACAGCATA TTGATAATTT ACATTTTTGA TATTTAATGA 360  
 40 TGGTTTCCCA ATTTTATAAC CATTGATTG TGAAAATGAG AAATAkTTCT TCACACCTTT 420  
 AACTACTTTA TAAGAATAGA AGTATTTATA GTCATATGCT TTATTTACTT TAGCATTTTG 480  
 45 ATGTGTTGCT GTTGTGTTAT TTTGGAACT TGGTACATGC ATACGATGTG AATTGTGACC 540  
 ATATGGTGGA ATTACCTTGA AACTATTTAT TTGTGGCACA ACACAAAAGT GATTAATTTT 600  
 AATGCTAGCA TGCCCTGGTG TAACAAATTT ATGCGCGTGA TATCCAGGAA CTGCAAAATG 660  
 50 ATGCTTGATA ATTAAAGATT gAGATGGATG TGTATATCTA GGCGATTCTG ATGGTTTAAC 720  
 AATAAGTGT TTATTAATAG AATCCTTTGC ATGATTTACA TGTTTATGTA CATGTGTTGA 780  
 55 TTTGTATGAA GTAATAACTT TCTTGTAGTG GGTTCGCGTA GTAATGAAGT GGTGGTTTAC 840

TTGTTGTGAA GCTGGATTGT TTGTTGCTAC ATTCACGCGA TTATTGATTT CTTTGTACTC 960  
 TGGCACAATG TTTCCTAACT TTGATTCTGG nACGACAAAG TTTTATCTA CAATTTTACT 1020  
 5 AGC 1023

## (2) INFORMATION FOR SEQ ID NO: 786:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:

TCAAGTTTAT TCGCTTGTG GAAAGCTTTA ACTTGATTTT CTAAAGCTTT ATCAAATTGC 60  
 GTTGATTCAT TATCAACTTT ATAACCTAAA GCTGATAAAC CAATTTTAAT AGTTTTAATA 120  
 TTTTATCAT CGTCTCCAAC TTAAATGTT TTCGTATTAG GAATGACATT TAAAGATTGA 180  
 TATTTAGGTG TGTCAATAGT AACGTCTGGT TTAATGCCTT TACCGTGAAT ATAATGACCA 240  
 TCTGGCGTTA ACCATTTTCAT TTCAGTATAT TTTAACAATG AACCATCCTT AAACCTCTCTT 300  
 GTAGTTTGTA CGACACCTTT GCCGAATGTT TTTGACCCAT AAACCTTTAGC TTTATTATAG 360  
 TCTTTTAGCG CACCAGTAAA CACTTCAGAA GCGCTAGcTG AACCTTCATT CACTAAGATG 420  
 GATATATCCA TGTCTTTCGC TTCTTTTAAC GCATCATTAG AAGTtGAATT GCTCAGTACT 480  
 TTACCTT 487

## (2) INFORMATION FOR SEQ ID NO: 787:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 803 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:

GnAAACnATA TTTAnAATTA AGTGTTTCGAT TTGCAGTAAA TTCATACAGA AAAGCTAAAA 60  
 TTAAATGAT ACaGTGGAAT AATGTCACAT TCTCCATAAA TAATTGACCG AAGAAGCATA 120  
 AACATAGAA TAGTACAGTA ACACTTACCG GCTGCTTTTC TTTATATATA ATTGCATTAA 180  
 TACAATAATA AATAATAAAG AGTGAAATTA GTGTTGATGT CGCATAATTA TAAAATCCTG 240  
 CAAACCAGCC ATATGTATCT GCATAAATAG CACTTGGTAA AATTAACATT AAAGAAAATG 300

TGCCCATACT AATGAGGCCA TATGAAAGCC AACGTAACCA GCTTACATGT ACAGCTATAA 420  
 TTTCAAAGAT ATTTCCGATA TAGCGACCAT TAAGTGATGC AAATCCTACT TTTAAAATAT 480  
 5 CAGTATTATA ATTGCTAAAC CATTGTAAAT CATCGTGCAT GAGTGGTAGT AAGATACCCA 540  
 TAAAAGTATA AAACAATAAT ATCGCAATTA ATATCAAAGT TGTCTTGTGT AATTGAATTG 600  
 TTTTCACTTT GCTAATCCTC AAATCTAGTT AAATTTTCCT CAACTTGTAG GTCGAAAAAT 660  
 10 TAATTCAATA TTTTAAATGT ATTTCTAATT TTCACCTATG CATGTTTCCT CAATCAAATT 720  
 AGATAAACAA GGTATTTAAT ATTACTTTCA ACAATTTATC TAAATCGCCC CTCGTCTTTT 780  
 15 TCTATGACGA ATGATTACAC TTG 803

## (2) INFORMATION FOR SEQ ID NO: 788:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:

GAAAAGTTGT ATTATGAATA AAGTTAATCA AGGTGCTCAG GAAGAGGCAA TGGAAGAGTT 60  
 ATTAGTGA CT TTTCAAAAAT TGATTAAAGA CTAAAGGAGT TTAAGATGAT ACATCAAAAT 120  
 30 ACGATTTACA CAGCGGGAAT TGAAACAGAA GAACAAGTAA GTCAATTGAC AGAACGCATT 180  
 TCAAATATGA TAGGTGTTCA TCAAGTGAAT ATTAATATAA TAGATGGTCA AGTAACTGTA 240  
 35 TCGTATGAGA CACCAGCAA TTTGAATAGT ATTGAAAAAG AAATCTATGA TGAAGGATAC 300  
 AAAATTGTAT TTTAGGGTAT AATGTAGAGT GCGCTATAGA TTTTAATTTT GAAAATAAAT 360  
 TAAAAATTTT GTAAATGATG TAGTAAAGGT ATGTCGAATA 400

## (2) INFORMATION FOR SEQ ID NO: 789:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 762 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:

GTTTAAAGAT GGAGAGATTA TTGATTTTTC AGCTGGAAAA GGTGAAGCGG TATTGAAAGA 60  
 TTTAATCAAT ACTGATGAAG GTTCAAGAAG ATTAGGTGAA GTAGCATTAG TACCTGATGA 120

ATGTCATTTA GCGATTGGAT CTGCTTACGC CTTTAATATT CAAGGTGGAA CGGAAATGAC 240  
 TGTGAGGAA AAGATTGCAA GCGGATTAAA TGATTCAAAT GTACATGTCG ATTCATGAT 300  
 5 TGGTAGTAGT GATTGACTA TTTATGGCAT ATTCGAAGAT GGTTCAAAAG AACTAGTATT 360  
 TGAAAATGGA AATTGGGCAT CAACATTTTA ATAAATGTTA TTTTGAGGTG CTGAGTAGGA 420  
 10 AATGAAACAT GTATTTAAAG GTCAAATACG TGATTAAAGT ATAGATTGGG AGATAAAATA 480  
 ATGACAAATC AGGACAGACC AATGAAATCT ATGTCAGAAT CAAAATGTTA TAAAAATAGA 540  
 CAAGTTTTCC CTCAGATAC GAATCACCAT CATACAATGT TTGGTGGTAC ATTGATGGCT 600  
 15 AATATTGATG AAATTGCAGC AATCACAGCT ATGAAACATG CTGGTGCGCA AGTAGTTACC 660  
 GCATCTACAG ACTCAGTAGA TTTCTTAAAG CCGATTAAAA CAGGGGACAT ATTACAATAC 720  
 GTAGCGATGG TTTCATACGC TGGGACTAGT TCAATGGAAG TG 762

(2) INFORMATION FOR SEQ ID NO: 790:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790:

TTTAATTTTA TCTTTTGGAT ATCACATAGA TGCTACTTTT CTATACTGTT CTAAATCTAT 60  
 TATTCGTCA CATTGATTG CAATAGCCAT ATCATGTGTT GCTAAAATCA GCACTTTATT 120  
 35 TTCATCGACC AAACCAAATA ATGATTGAAT AATCATCTGT CCTGTTTTAG GATCTAACGC 180  
 ACCCGTTGGT TCATCAGCTA ACATAACAAT CGGATCTTTT AACATCATT TAATTAAAGC 240  
 GACACGTTGT TGTTACCTC CACTTAGCGT ATGAACTTTT CTTTTTAAAC TGTTTGACAG 300  
 40 ACCAACTGT TCTATATAAC GtATCTtctAT TTGTnCTTTT TCTTTCTTAC TTATTTTTTT 360  
 ATATGCTAAT CCAATATCTA AATTTTCATT TACTGnCAAA 400

(2) INFORMATION FOR SEQ ID NO: 791:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791:

AACGTAAAGC GGAAGTTGGG ATGGTTGAAG ATGCTGAATT TCATGCGCAA CTACATCGTT 120  
 ATAATGCTTT TCTAGAGCAA CATCAAGATG ATAAAGTGTT GTATTnGAA ATTGGAATTG 180  
 5 GTTATACTAC ACCACAATTT GTGAAGCATC CTTTTCAGCG TTGACACGTA AAAATGAAAA 240  
 TGCCCTTTAT ATGACGATGA ATAAAAAGGC TTCGCATTCC GAATTCAATT CAGGACGTAC 300  
 10 CATACTTTAA CTGAGATTCT CAACTTGTTT AGCAGACTCC GGACGCAGCA CACGAAATAC 360  
 ACATGGGGGC AGAGTnACTT ATGGACCGTT GAATGnGATA 400

(2) INFORMATION FOR SEQ ID NO: 792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 678 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792:

GTTCCGTTTG ATACAGAGAA GCGAATGTAA GCATAATCTT TAACAGTATC GTATGATAtA 60  
 25 AATTAAATTGG CAACTTTTTG TCACCTTCAT AAACCTTCAA TTTTCTCCAA AATTGACCTG 120  
 ATTGTAATCC TAATTCAATT TCTGGTTTTG AATCAGTGAA AATAACTCTA GCAGGTTTAA 180  
 30 CAGAACTTGC ATAATGATAA AACTGTTGAG TTCCATCTTT CTTTTTCATT TCAAAATCAA 240  
 TTGGACGAGA GTTTGGTGCG CTATGATCTT TGTCTTTTAT TGCAGGGTTT TTAATCGCTT 300  
 CTCTAAGTTC CTGATTCAA ATAGGATATG TATTGTTAgT GGCyTTTGCT GCTGGTTTAA 360  
 35 CTCTTTTTGT TTCCTTAGGG GcTTTAACTT CTTTAACTTC TTTAGCTTCT TTTGTTTCAG 420  
 AAGTAGGGGC CTCAACTTCT TTATTAGATA CTGAGACAGC ATTAGCTACT GGTTTAGTTT 480  
 CTGGAGCTTT TTCAGATGTT GTTGTGGAC TTGCAACTGC TTCAGTTTTT GGTGTGCTT 540  
 40 CTGTATTTGT ACCACCTGTT TCTTCAGCTG CTGCTTGTGT TCGCCATTTG ACATTAATAA 600  
 TAAAAGTGTA CTAATTGCTA CAGATGCAAC GCCTAGTGAT GACTTTCTAA TTGAATAAAA 660  
 45 TGATTTAAAT TCTTTTTG 678

(2) INFORMATION FOR SEQ ID NO: 793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ACTGGCGGAT CCACGATGGC ATGTGTTAGT GAAGCAATTC ATTTATTACC ATATAATGTA 60  
 TTCTTCGTAC CAGCCAGAGG TGGACTAGGC GAAAnTGTTG TCTTTCAGGC AAACACAATT 120  
 5 GCAGCCAGTA TGGCACAACA AGCTGGCGGT TATTATACGA CGATGTATGT ACCTGGATAA 180  
 TGTCAGTGAA ACAACATATA ATACATTGTT GTTAnGAGCC ATCAGTCATT AAACACTTTA 240  
 GGACAAAATT AAACCAAGCA AACGTTAATA TTACACGGGC CTTTGGTGAT GCGCTGGAAG 300  
 10 ATnGGCGCCT CGGACGTCCA ATCACCTGGA AAAGGTCCTT GGAACCACTT C 351

(2) INFORMATION FOR SEQ ID NO: 794:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 794:

GGGCGAGGCG TTCGCGCACC GGCCGAGCAG CAAATAGGCC GGGATGTCCG GTCTTGCTGC 60  
 25 AGGTCCGAAA AATATCAACT TGAAGAGGTA ACACCGnTAG ATATGTTTCC ACAAACAACA 120  
 CATGTTGAGA CAGTGGCATT ATTCAATTTG AAATAGCGCA CATGATTTGA GATAAAATTT 180  
 30 CGCCTTAATA AGTGAAGAAA GAAGTCGTAT ATTAAAATTT TATTACAGCC AATTTACTTT 240  
 CTTGATATGA ACTTTTTTAAA TTAAATGTGA CATTGTATAC TATATTTAAA GAAGAATAAG 300  
 AATGTCATGA TCGGGAGGGT TGGTAATGCA TAAATTTGAT TTAACGACAA ATAATTTTCA 360  
 35 AATGCGAGGT TTATTATCCT GGCAACCTGG TTATTGCGTT 400

(2) INFORMATION FOR SEQ ID NO: 795:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 407 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 795:

ATGTTCCAGG AACGTATTTT TACAACCGAC AATTAGCATA TGTCATAATG AGTTTTATAA 60  
 50 TTGTATTTTT TATTGCATTT TTAATGAATG TTAAATTACT GAGTAATATT AAAGTGCAAA 120  
 AAGGTATGAT TATAACTATC GTCTCACTAT TATTACTGAC GTTAGTAATA GGTAAGATA 180  
 TTAATGGTTC TAAAAGTTGG ATAACTTAG GATTTATGAA CTTACAGGCA TCTGAGTTAT 240

TAAGTAAACC AAAATTAATc TTAAGTCCTA TTGTATTAGC ATTAGGTTGT ACGTTTTTAG 360  
 TTTTCCTACA AAAAGACGTG GGCAACATTA CTAATATTAA TnATnTT 407

(2) INFORMATION FOR SEQ ID NO: 796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1053 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:

CAGTAGGTAC ACTTGCAGCA TTTGTTGGAT ACTTAGAGTT ATTGTTCTGGG CCTTTACGTC 60  
 GTTTAGTCGC ATCATTTACA ACTTTAACGC AAAGTTTTGC TTCAATGGAC CGTGTATTCC 120  
 AATTAATTGA TGAAGATTAT GACATCAAAA ATGGTGTGG TGCTCAACCT ATTGAAATTA 180  
 AACAAGGTCG TATTGATATT GATCATGTTA GTTTTCAATA TAACGATAAC GAAGCTCCAA 240  
 TTTTAAAAGA TATTAATTTG AGTATTGAAA AAGGAGAAAC AGTTGCTTTC GTAGGTATGA 300  
 GTGGTGGTGG TAAATCAACA TTAATTAAC TTAATACCGAG ATTTTACGAT GTAACCTCTG 360  
 GGCAAATTTT AATAGaTGGT CACAACmTTA AAGaTTTTTT AACGGGAAGT TTAAGAAATC 420  
 AAATAGGATT GGTGCAaCAG GATAATATTT TATTCTCTGA TACAGTTAAG GAAAATATTT 480  
 TaCTTGGTCg TCCaACAGCa ACAGATGAAG AAGTAGTTGA AGCGGCgAAA ATGGCTAATG 540  
 CACATGACTT TATTATGAAC TTGCCACAGG GATATGACAC TGAAGTAGGT GAACGAGGTG 600  
 TTAAATTATC AGGTGGTCAA AAACAAAGAT TATCGATTGC TAGAATATTT TTAAATAATC 660  
 CGCCAATTCT TATCTTGGAT GAAGCAACAA GTGCACTTGA TTTAGAAAGT GAATCCATTA 720  
 TTCAAGAAGC ATTAGATGTG TTGAGTAAAG ATCGAACGAC ACTTATCGTA GCGCATCGCT 780  
 TGTCCACTAT TACACATGCT GACAAAATTG TCGTAATTGA AAATGGACAT ATTGTTGAAA 840  
 CAGGTACGCA TCGTGAATTG ATTGCAAAAC AAGGTGCTTA CGAGCATTTA TATAGCATTC 900  
 AAAACTTATA AAGTATTAGT TGTTTGACTT CAGTACAATC TTGAAGAGAA AATTGTGAAC 960  
 AGGATGGTGG GGTCATAACA TAGAAAAAGC AGTAAGAGAT TTTCTTAGTT GAAAATAATC 1020  
 TThCTGCTTT TTAAATTTA ATTTCTGnGAT TCA 1053

(2) INFORMATION FOR SEQ ID NO: 797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797:

5 AAGAGTGACT CCTGAAGTGA AAGAAGGGGA CCGTGTCTGTG TTCCAACAAT ATGCTGGTAC 60  
 AGAAGTTAAA CGAGATAATG AAACATATCT GGTATTAAAT GAAGAAGATA TTTTAGCAGT 120  
 TATTGAATAA TACAGAACTT AATTCATAAA TAAATTAAAT AGAACGAAAA TGAAACACAA 180  
 10 CTAAACAAAT GGAGGTTTAT CATTTATGGT TAAACAATTG AAATTCTCTG AAGATGCACG 240  
 TCAAGCAATG TTACGTGGTG TTGACCAACT TGCAAATGCA GTTAAAGTAA CGATTGGTCC 300  
 TAAAGGACGT AATGTTGTAT TAGATAAAGA GTTTACAGCA CCTTTAATTA CGAATGATGG 360  
 15 TGTGACGATT GCyAAAGAAA TCGAATTAGA AGATCCATAT GAAAATATGG GGGCTAAACT 420  
 AGTTCAAGAA GTCGCAaATA AGACAAATGA AATTGCTGGT GACGGTACGA CAACTGCAAC 480  
 AGTATTAGCT CAAGCAATGA TTCAAGAAGG CTTGAAAAAT GTTACAAGTG GTGCGAACCC 540  
 20 AGTT 544

## (2) INFORMATION FOR SEQ ID NO: 798:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798:

CAATTGCATA GATATTGCTG ATAGACGTAC GGCTTTGTTT ATCAACTTCT AATAATCCAC 60  
 35 GGTCAGCGAA TTTAACACCT AATTCGTCT GTGTTTGGAC GACGACCTAC AGTTACTAAT 120  
 ACATAATCAG CTTGATTGT TTTCTCTTCG CCTTTAGCTT CATAAGTAAC TTAACTCCG 180  
 TTATCTGTTT CTTGAGCTGA TTTAGCCATA GCTTCAGTAA CGATTTCAAC ACCTTTTTTCT 240  
 40 TTCATACCTT TTTTAACAGG TTGTGTGCAT TTGnTTTTTC GAGGCCACCT AAGATATCTT 300  
 TAGCACCTTC AAGGGATGGG GTACTTTCTG nAACCAAAGT TAGCAAATGC TGTACCTAAT 360  
 45 nCTGGTCCAA TG 372

## (2) INFORMATION FOR SEQ ID NO: 799:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 1182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799:

5 AAACGACATT TGTTTAATTG GAAGAATTaG CACCATTTTT TGAGGCGGGT ATAGATTCAT 60  
 TTAAAATCGA TGGTATTCTA CAAACGGAAG AATATATTAA TGTGGTAACG GAACAGTATC 120  
 GTCAAGCGAT AGATTGTGAC AATGAAGATC CTGAAATCTA TGAAGATGAG AAATTTATGT 180  
 10 TGATGGATCC AATTGAAGAA ATTCAACCTg ATCATCGACC ATTTGACGAA GGTTCCTTAT 240  
 ATAAACAAAC AGTATATTAA GGAGGTTAAT CATGAAGACA ATAGAAGAGA TTAAATCAAC 300  
 TCCTAAACA GTTATGAAGA AACCAGAATT ATTAGCACCT GCTGGAAACT TAGAAAAGTT 360  
 15 AAAAATAGCA GTACATTATG GCGCTGATGC CGTATTTTTA GGTGGTCAAG AATATGGATT 420  
 ACgTTCaAT GCTGaTaATT TCaCGATGGA AGAAATAGCT GAAGGTGTTG AATTTGCGAA 480  
 CCGTTACGGT GCCAAAATTT ATGTTACGAC AAATATTATT GCACATGATG AGAATATTGA 540  
 20 AGGTCTAGAA TCATATTTGC GTAATTTGGA AAAGACTGGT GCGACAGGTA TCATTGTTGC 600  
 AGATCCTTTA ATTATCGAAA CATGTAAAGA AGTTGCGCCA AAAGTTGAAA TTCATTTATC 660  
 TACTCAACAA TCACTTTCTA ATTACAAAGC TGTAAGATAT TGGAAAGAAG AAGGATTGGA 720  
 25 TCGTGTGTGA TTAGCACGTG AGACCGGCGC GATGGAAATG CGTGAAATGA AGGAAAAAGT 780  
 AGATATTGAA ATCGAAGCAT TTATTCATGG TGCTATGTGT ATCGCCTATT CAGGTAGATG 840  
 30 TACATTAAGT AATCATATGA CTGCAAGGGA TTCCAACAGA GGCGGTTGCT GTCAAAGTTG 900  
 CCGTTGGGAT TATGAATTAT TAGAAGTTGA TGATAATGGT GAACTTGATG TTTTTTATAA 960  
 TCAAgGTGAA GTTACACCGT TTGCGATGAG TCCTAAAGAT TTAAAATTAA TCGAATCAAT 1020  
 35 TCCTCAAATG ATGGATATTG GTGTGGACTC ATTAAAAATT GAAGGACGTA TGAAGTCAAT 1080  
 TCATTATATT GCAACAGTTG TCTCAGTATA TCGTAAAGTC ATTGATGCGT ATGCGGCAGA 1140  
 TCCTGACACT TTAAGATTAA TCCGGAATGG TTAATAGAGT TA 1182

## (2) INFORMATION FOR SEQ ID NO: 800:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 800:

50 GTATTCTTCC AATAACACCT TTCATTTGGA AACCGTTTAG AAAGAATACA GTTACTTCAG 60  
 TTTGGTTTGC TTAAAATTC TCTaGTGCTT TGTCTTGGAT GTTTTCGtTG CAATCATCTG 120

TTTTCTTTAT CTAACCAATG AACACTCATT TTATTCTTGA ACCATGTCAT TTGTCGTTTT 240  
 GCATATTGGC GTGAATGTTG CTTTAAATCA TTGACAGCAT CTTCATAAAT CATTGTGCCG 300  
 5 TTAATCACAG GTATTAATTC TTTATATCCA ATAGCTTGCA TACTTTGGCA AGATTCATAG 360  
 CCTTGTTCAA CAAGTTGTTG CACTTCTCTA AATAATCCGT GATCCAACAT AATATCAACA 420  
 CGTTTATTTA TTCTTGAATA TAATGTTTTA CGCGACATTT CAATCCCTAA TAATAATGTA 480  
 10 TCATAATTTT CAGTAAATTG TTGCACTTTC TTGCGATTAC TCAAAAGTTT TTTTGTTTTT 540  
 AAATAATATT CAATAGCGCG CAACACTCTT TGGcGGTTGT TAGGGTGAAT ATTTTCTGaC 600  
 15 AGAAACCGaC ATCAAATTGA GCTAAATAAT CGTGTAGTTG CTGATTATCT AAATGTTCTA 660  
 ATGCAGATAA CTTTTGTTTA ACTATGGATA ATTGTGCAGG TGTAcTGTTC CATCTTCTAA 720  
 TTCATAATTA TATATTAATG ATTGAATATA TAAGCCTGTT CCACCTGCTA TGATTGGaAC 780  
 20 TTTACCTCTA TTCGtATAT CAGTAATTAA ATCTTCTGCT AATCGCTTGA ATTCATATGC 840  
 TGAAAATGTA TCATCAGGAT TCAAGATATC AATTAAATGA TGTGGAATAC CATCCATTTC 900  
 TTCAGGTGTh ACTTTTGCAG TTCCAATATT CATATGTCTG TAGACTTGCA TAGAGTCACC 960  
 25 GCTTATGATT TCACCATTGA TACGCTTCG 989

(2) INFORMATION FOR SEQ ID NO: 801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 801:

CGTTAGATAT AGAATTAAAA GATAATATTA AATTTCAAAA CGGTCAAAAA TTGACTGCAG 60  
 40 AAAAAAGTGAA ATCTAGCCTT GAAAATAGCA TGAAAAAAG CGACTTGGTC AAATATTCAT 120  
 TACCAATATC ATCAATTACC GCTAAAGGTC AAAAAGTAC AATTAAAACC AACTCCGCTT 180  
 ACCCTGaACT TGTATCTGAA TTAGCTAATC CTTTATGGC AATTTATGAT ACAGATGCTA 240  
 45 AATCAGATGT TAATCAAACCT CCTGTTGGTA CAGGCCCTTA CCAAATAAAA GATTATAAGC 300  
 AATCTCGAAA AATATCATTG TCGAATTTTA AGGACTATTG GCAAGGTAAA CCGAAACTTG 360  
 ATCATATTAC TGTGACGTAC CAAGAAGACG GCAATAATCG CGTCAGAAAT TTAGAATCTC 420  
 50 AAAAAAGATGA TTTAATAACT GATGTCCCAG TTAATAAAGT TCAAGACATA GAAAATAATC 480  
 AAAATTTAAA AGTGTCAAAA GAATCTGGAT TTAGAACTTC TTTACTTATG TATAATCATA 540

## (2) INFORMATION FOR SEQ ID NO: 802:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 802:

GCGAATTCGT ACACACATAT ACACAAAGAT AATCATAGTT TTACATTGAA GCACATGAAA	60
GATAATTCAT TTAAAGGAAG GTATTATCAA TGAATAAAAA AATGGGATTA TTAGTTATGG	120
CTTATGGCAC ACCTTATAAA GAAAGTGACA TAGAGCCATA TTATACAGAT ATTAGACATG	180
GTAAACGTCC ATCTGAAGAA GAACTTCAAG ATTTGAAAGA TAGATATGAA TTTATAGGTG	240
GTTTATCACC ATTAGCAGGT ACAACAGATG ACCAGGCTGA TCGCTAGTT TCAGCATTAA	300
ATAAAGCATA TGCAGATGTT GAATTTAAAC TATACTTAGG ATTAACACAC ATTTCCACCAT	360
TTATCGAAGA TCGGGTTGAA CAAATGCACA ATGATGGCAT TACTGAAGCA ATCACGGTAG	420
TACTAGCACC ACATTATTCT TCATTTTCAG TAGGATCATA TGACAAACGT GCTGATGAAG	480
AAGCTGCAAA ATATGGTATT CAACTTACAC ATGTGAAACA TTATTATGAA CAACCTAAAT	540
TTATTGAATA TTGGACGAAT AAAGTCAACG AACATTAGC TCAAATACCG GAAGAGGAAC	600
ATAAAGACAC GGTATTAGTT GTTTCGGCAC ATAGTTTGCC AAAAGGTTTA ATCGAAAAGA	660
ATAATGATCC ATATCCACAA GAACTAGAAC ATACTGCGCT TTTAATTAAA GAACAATCTA	720
ATATTGAACA TATCGCGATT GGTGGCAAT CTGAAGGTAA TACAGGTACA CCTTGGGTAG	780
GGCCAGATGT ACAAGATTTA ACACGTGATT TATATGAAAA ACATCAGTAT AAAAATTTTA	840
TATATACGCC AGTAGGTTTT GTATGTGAGC ATTTAGAGGT GCTTTATGAC AATGATTATG	900
AATGTAAAGT AGTTTGCGAT GATATTGGTG CGAATTATTA TCGTCCAAAA ATGCCGAATA	960
CACATCCATT ATTTATCGGT GCAATTATTG ATGAAATCAA GTCTATATTT TAATGACGAA	1020
AGAAGCGTGA AACGTTGTGA CTAAATCAGT GGCTATTATA GGAGCGGGGA TAACAGGTTT	1080
ATCAAGTGCA TATTTTTTAA AACAGCAAGA TCCTAATATT GATGTAACCA TCTTTGAAG	1139

## (2) INFORMATION FOR SEQ ID NO: 803:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 803:

5 TATCCnAAAT AnAAATGTGC GCATTATCA AAACCTTACA TACAATAGAG TTTTCCCTAA 60  
 CAGTAAATTA GATATTATTA CACCTGTTGA TATGTCTTCT AATGCCAAAC TGCCAGTTAT 120  
 TTTTGGGATG CACGGTGGTG GTTATATTGC GGGTGATAAG CAGTATAAAA ACCCATTATT 180  
 10 AGCGAAAATT GCTGAACAAG GGTACATTGT TGTGAATGTA AATTATGCAT TGGcGCCACA 240  
 ATATAAATAT CCCACACCAT TAATTCAAAT GAATCAAGcA ACTCAATTCA TTAAAGAAAA 300  
 TAAAATGAAT TTACCTATTG ATTTTAATCA AGTAATTATT GGCGGTGAYT CTGCAGGTGC 360  
 15 TCAATTAGCT AGCCAATTTA CGGCAATACA GACGAATGAT CGCTTAAGAG AAGCCATGAA 420  
 ATTTGATCAG TCATTCAAAC CATCGCAAAT TAAAGGTGCT ATACTATTTG GTGGTTTTTA 480  
 TAATATGCAA ACAGTTAGAG AAAC TGAGTT TCCAAGAATA CAGTTATTTA TGAAAAGTTA 540  
 20 TACTGGCGAA GAAGATTGGG AAAAGAGTTT TAAAAACATT TCACAAATGT CGACAGTAAA 600  
 ACAATCGACA AAAAAATTATC CaCCAACATT TTTATCTGTT GGAGATAGCG ATCCATTCTGA 660  
 AAGTCAAAAT ATAGAATTCA GTAAGAAATT ACAAGAATTG AATGTACCAG TAGATACTTT 720  
 25 GTTTTATGAT GGTACGCATC ATTTACATCA TCAGTATCAA TTTCACCTTA ATAAACCTGA 780  
 ATCGATAGAT AATATCAAAA AAGTGTTACT TTTCTTAAGT CGTAATACAT CCTCTAGTGG 840  
 TATTCAAACCT GAAGAGAAAC CACAAATAGA AAATCCGAGT AATGAATTAC CGTTAAATCC 900  
 30 TTTAAACTAA TGATAAACAG TAGTAATTTA TTAAGTAAAG AACATTTAAG ATTTTCAAAT 960  
 TAAAAACGAG AATTTAAAAC ATGTGGGTGC 989

## (2) INFORMATION FOR SEQ ID NO: 804:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 711 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 804:

45 TAAnCCCTGG TTTAATGATT TTGATTACGT GTTTTTATAA TAAAAACATA TCGAACATTG 60  
 ACTACGTTAT TAAGCTGCTT TTTTGTAAC TTTATAACCA ATAGCTTAAG ATTTAAAACT 120  
 50 AATCGGAAAG AACAATGATT CACCAAnAAAA ATATTTATGT TGCTATTAAA AATCAGTTAA 180  
 TACGAATGTT AAAATACGTT TGATTTTCAT TAATAATGAT TCAAGTTTAT TTAAATGAGC 240  
 GTTAATGTCA GTCTGTTTTG ATGCACCTTA TAATAAGAC AGATAGTTCA AATTACGTAA 300

AAAGCAACAT TAGCATTAGG AATATTA ACT ACAGGTGTGT TTACAGCAGA AAGTCAA ACT 420  
 GGTACGCGA AAGTAGAACT TGATGAGACA CAACGCAAAT ATTATATCAA TATGCTACAT 480  
 5 CAATACTATT CTGAAGAAAAG TTTTGAACCA ACAAACATTA GTGTTAAAAG TGAAGATTAC 540  
 TATGGCTCTA ACGTTTTTAAA CTTTAAACAA CGAAATAAAG CTTTTTAAAGT ATTTTTACTT 600  
 GGTGACGATA AAAATAAATA TAAAGAAAAA ACACATGGCC TTGATGTCTT TGCAGTACCT 660  
 10 GAATTAATAG ATATAAAAGG TGGCATATAT AGCGTTGGCG GTATAACAAA G 711

(2) INFORMATION FOR SEQ ID NO: 805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 805:

ATCAGGAAAA ACAGaATAAT GTAAATCAAG CTGTT CAGCC TCAAAATAAT ACTAATGAAA 60  
 25 CATCAAAAGT ACCGGCTAAT TTTGTCAAAT TGAATGATAT TAAACCAGGT GATACTTCTA 120  
 TACAAGGAAC AACTTTACCA AATCAATTTA TACTATTAAC TATTGATAAA AAAGATGTGA 180  
 GCTCAGTTGA AGATTCTGAC AGCAGCTTTG TTATGTCTGA TAAAGATGGG AATTTTAAAGT 240  
 30 ATGACTTAAA TGGTCGCAAA ATTGTT CATA ATCAAGAAAT TGAAGTGTCT TCATCAGATC 300  
 CCTATTTAGG TGACGATGAA GAAGATGAAG AAGTAGAAGA AACTTCAACT GAAGAAGTTG 360  
 35 GTGCTGAGGA AGAAAGTACA GAAGCTAAAG CTACATATAC AACACCGCGA TATGAAAAAG 420  
 CGTATGAAAT ACCGAAAGAA CAGCTAAAAG AAAAAGATGG ACATCACCAA GTTTTTATCG 480  
 AACCTATTAC TGAAGGTTCA GGTATTATTA AAGGCCATAC CTCTGTAAAA GGTAAAGTTG 540  
 40 CTCTATCTAT TAATaATAAA TTWATTAACT TTGAGaCAAA TGCTAtGGTG GtCCaAATaA 600  
 AGAAGaAGCG AAATCTGGAT CAGAAGGAAT CTGGATGCCT ATTGATGACC AAGGATACTT 660  
 TAATTTTGAC TTCCAAACGA 680

(2) INFORMATION FOR SEQ ID NO: 806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GTATTTTCATT AGCCATTGGC AATTGACATC TGACAATGAG GAATGGCTTT TGCATTGGAA 60  
 TTCACAGTTG GAGTGCATTT ACTGGTTATT TTGGAGGTCA TTGTTGATAC ATTATTAATG 120  
 5 GAGAATAACC GAATTTGTTA TGTTATTTCC ATTTTAAATA TTTGCAATTG TATTAAATGC 180  
 TGCACTTGGA GATAAAATTA AAAATCCTTA TGGATCTGCC ATAATTCTTG TTCTAGTTAT 240  
 TATCGTATTA AGTTGGGGAG GTATTGACAA GACTTGTTTCG TGGTAAAGTA CTTCAAGAAA 300  
 10 AAGAAAATGA ATACTTTTGT GCAGCAAAAT CAATTGGTAC ACCCACATAT AAAATTATTT 360  
 TGAAACATCT TTTGCCGAAT ATATTAAGTG TAGTTATCGT ACAAGCAACA TTGTTATTTG 420  
 CCGGTATGAT TGTAGTGGAA TCAGGrTTGA GCTTTTTTAGG ATTCGGAATT AGTAAAGCAA 480  
 15 TACCATCTTG GGGTAATATG TTGAGTGATG CTCAAGAAGG GGATGTTATA AGTGGTAAAC 540  
 CGTGGATATG GATGCCACCT GCTATAATGA TTACATTAAC TATATTAAGT ATAAACTTTG 600  
 20 TAGGGGAAGG GATTAAAGAT GCTTTTAATC CTAGAGGTAG ACGTTAAATA ATAAAAGAGG 660  
 CACTAGTTAA TTCTAGTACC TCTTTATTTT ATCTCTTACG TCCTAAACCC ATCGCTTTTT 720  
 CCATTTTTTTT GACAGTTTTA AATGAAACTT TGTGTGCTyT ATCTCTACCT TGATCTAAAA 780  
 25 TATCAyCAAG TTTATcTGAG TTATAGAAAC TTTCGTATTT TTCTTGGAAT TCTACTAAAA 840  
 ATGCTTTAAC TATTTcAGCA AGGTCACCTT TAAATTTACC ATAACCTTCG CCCTCATATT 900  
 TTGCCTCAAT ATCTTTAATT GGCATGTCTG TTAATCCAGC GTATATTGAA 950

(2) INFORMATION FOR SEQ ID NO: 807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 807:

GTTACCAGTC GAAGCTTTAC GACCTGTTAC GAAACATTGT TTACCCATAT GAGTACCTCC 60  
 TTTAATAAAT ATAAATACAC ATAACTACTT ATATACTTAA TTAAGATAGC ATAGTTTCAT 120  
 45 TTGAAAAACA ATGAATAATT TTCACATAAA AGTCAAAAAT ACTGAGTTTT GTGATATAAT 180  
 TGTAGACTGT GAAGTTATGT AGTATGATAT TTTAGAGAAA TAAGTGAATG AAACATTTAA 240  
 AATTTTTTATT TrATGATACT ACATCTATTA AAAGAAAACG CCTATAGATA ATCGTCaTGA 300  
 50 GTGTAAATTC AGTTtACTCa AcAtATAaTA GGkGaTTTTAA gCgTAAGtCa TTCTGATAAG 360  
 TTGTACCATT GATATTTTAT GAAATAnTCh ATGAACTTAA AGCGTTTATG CTACACTA 418

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 842 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 808:

10	AATGGCnATT AATCTTTAAT ACGATGCTTG AGGATTTTTC CTAATAAAAC CTTGATTTCm	60
	AAAAGGGTTT AAATCmAATG AAACAATAAT AAaAAAATGw CGCAATATAA TAATAAGTAC	120
15	AAATTTAATT AAGAAATTAA ATTGATTGTA TATGTATATT TTGGTAACGT AAAAGAGAnA	180
	TATACAAAAT AATTAATTAT TTATATGAAA AGAGAATATA AATGAAGTAT AAAACAGAGA	240
	GACGTGAAGC GATGGGATAT TTAaMAAGGT TTGCATTGTA CATAAGCGTT ATGAyTTTAA	300
20	TATTTGCGAT AGCAGGTTGT GGCAAAGGTA ATGAAACAAA AGAAGATTCA AAGGAAGAAC	360
	AAATCAAAAA GAGCTTTGCG AAAACATTAG ATATGTATCC AATTAAGAAT CTCGAGGACT	420
	TATACGACAA AGAAGGATAC CGAGATGGCG AATTTAAAAA GGGTGATAAA GGGATGTGGA	480
25	CGATATATAC AGATTTTCGCC AAAAGTAATA AACAAGGTGG ATTGAGTAAT GAAGGTATGG	540
	TCTTATACTT AGATAGAAAT ACACGGACTG CAAAGGGACA TTATTTTGTT AAGACATTCT	600
	ATAATAAGGG CAAATTCCCA GATAGAAAAA ATTATAAAGT TGAAATGAAA AATAATAAAA	660
30	TTATCTTATT AGATAAAGTA GAAGATACAA ATCTAAAAA GAGAATAGAA AACTTTAAAT	720
	TTTTTGACA ATATGCAAC CTAAAGAAT TGAAAACTA CAACAATGGT GaTGTCyCAA	780
	TTAATGAGAA TGTTCCAAGT TATGACGCAA AATTTAAAT GAGCAATAAA GATGAAAATG	840
35	TT	842

(2) INFORMATION FOR SEQ ID NO: 809:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 809:

40	TAAGACTATG CCATCTTGGC AACGCGTTGT CGCATATTCA TTATTAGTAA GTATATGCAA	60
50	GCATGATTTT GCCATAACtT TACcTcTtTTC TATATTTAAG TACCACTTTT ATCATTCCCT	120
	ATAATATTTA ACTTATTTAA TTAAACGTAA ATTTAACACA ATACGAATAC CAAATCAAAA	180



AAAAATAGAT GTAGTCAGTT TAATTAACT ATCCAATTGA AAACACACTA CTTTTTAGTA 300  
 TTTTCAAAT AATTTTAAAT GACCACATCT ACAACGTATT ACTATTATCT TTTGTTAGTT 360  
 5 ATATATTCAT TTTCAATTTA rAAATAAACA CTTAtTTAAA TCACATTCTA CTTTTGAGAT 420  
 GAGCTCAAAC TAACATTAAA TTGTTTATAT T 451

## (2) INFORMATION FOR SEQ ID NO: 810:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1499 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 810:

ACATTTTGTG CTTGTTGTCC AATCCAATTT CTACTTTGTT GAACAGTATG AGTTGCTTGA 60  
 CCACGCATGT TACTCAGCAT TTGTCCAACA TGAGTATTTT GAGCAAAGTT ACGAGATTGA 120  
 TTCAACACAC TGTTTTTCAT CATTnCCATT TTAGGTGAAA TACGACTAAC TGCTTGTTGC 180  
 25 ATTGTCTTTT GCAATCCTGT TTAACTGCA AATTTTCTC CGCCTTTGAA GCCTAATTTT 240  
 ATTAACTTTT TCCCAGCACC TTTGAGGAAG CCCATACCTG GCAATGGAAT AAGCGAAAGT 300  
 CCTTCCATGA TTCGTTCTTC TTTAGATAGC TTTCTTCCAG TTACAATATT TTTTCTGTG 360  
 30 GCTGCATTTG CTGCTGAATA AGCGGAATAA GCACCAATAG CTACTGCTCC AGCAACAGGA 420  
 TTAATACAAG ATAAAACTAC CATACCAGCT AGTGCTGCAA TCTCTATAGC TTCTTCTTTT 480  
 TTCTTTTGCT CCTCTAGcTC TTCCGCTTCA GCTACTGTCA TGTAATCACA AGAAGCGCCC 540  
 35 TGAGTCATCA TTTTTTCAA ATCACTTTTA GATAATTTCT TATCTTCTTT TTTCAATTCT 600  
 TTGTAATGCT GATCAATTAC TTTTACAAAT TCTTGATCCG ATTTTAATAT TTCATCGATG 660  
 CTATAAACAT CGCTGTCACT TTTCTTGGCA TCTCCCTTTG CAATTTTCCC AGAAGCCCCA 720  
 TAGGTATCTC TACCATGTCC ACCACCATTT TTAATTAGTA TATTTTCCAA TTTAACATTC 780  
 GTTATACCTT TGAATGCTTT ATCTATATCT TCTATAAATG GCGTGTCAAT AATTTCTTTC 840  
 45 ATTTTCGAAT CTAATTGAGA TGCATAATCA TATAACTCaT TTTGATAATA CCCCATTAAT 900  
 TTAGATCCTT GTGGAcCTAC TACACTACTT GTTAATGATA TTGCGCCATC TTCGTCTAAA 960  
 GAACTGACAT CGCTTACCGC ATCATCCATT GTTGTATCTA CATCTAAGAA GTCTTGACCC 1020  
 50 TcTATTGCAT CTATTACACT TTGGATAGAT GACTTTTCAT TGTCATAATC AGCTGTTAGA 1080  
 TATTCAATAT CTTTTGTCAT GTCATGCACC TATCCCTCAA TATTATAGTA AAGCTTGGCA 1140

CCACCGAGTG TACTCAATGG ACCTTTGAGA CCACTAATGA CTGTTGCAGC ACTACTATAG 1260  
 CCATTTTCCA TAGAATGTGC AGCTTTTTC A TACTGTAGT AATTTAATTG CGCTATTTTT 1320  
 5 CCAAAGTTTT GAGCTATTTT ATCATACTTT TGACTTATGC TTTCCAATTC TTTTACAACA 1380  
 TGTGCAATCG TTTGAGCTTT AACACTAATT TTTCCACTCA ACGTCATTAC TCCTCtGcTt 1440  
 TATtAATATG ATTTTcATCA GTATCGAATC CAAATAATTC TCGTGATAAA nGTATTGAA 1499

(2) INFORMATION FOR SEQ ID NO: 811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 811:

CnCGCTGCAC CGAAGAATGC TTTTGGTTTG TGTAAGATG CAGGATCTAA ACCACCTGAT 60  
 AATGTACGAC CACTTGGTGG AATAACYAAG TTATAAGCGC GTGCTAATCT CGTTATAGAA 120  
 25 TCCATTAAAA TAATGACATC TTCCCAATT TCTACTAAAC GCTTTGCACG TTCAAGTAAT 180  
 AATTCAGCTA CTTTAACATG GTGTTCTGGT GGTTCGTCAA ACGTTGAATG AACGACTTCA 240  
 GCAGCTTCTA CTGAGCGTTC TAAATCTGTT ACCTCTTCAG GACGCTCGCC AACTAACAAA 300  
 30 ATAAATAGCT TTGCATCTGG TTTGTTCGTA CTGATTGCAT TCGCTATTTT TTTTAATAAC 360  
 GATGTTTTAC CTGCTTTAGG TGGCGCCACT ATTAAACCAC GTTGACCTAA ACCAATCGGT 420  
 GTTACTAAAT CCATGATGCG CGTTGAATAA TTTTGTATTT CTGTCTCTAA TTTAATACGC 480  
 35 TCATCTGGAT AAAGTGGTGT CAAAGCTTGG AAATGCGGAC GTTCTTTCAC TTCTTCTGCG 540  
 TTATGGTCAT GACAAAGTCA ACTTGTAATA AGCCATAATA TTTTTCGTTA TCTTTAGGTT 600  
 TTCTAACTTT CCCAGTTACT 620

(2) INFORMATION FOR SEQ ID NO: 812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1094 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 812:

CCGGCTGAAA TTAAGTTCTT GTTATATTTT GCAAAAATGA CAAAGAAAGA TAAAAATAAA 60

TGAAGTATTT GCAATTAGAG AATTGTTAGA GAAAGGTTTG ATTGGTGATT GTATTCAACC 180  
 TATAATTGAA CCAATTAAAT ATACAACCAC ATTTAAAAAT ACTTTGCAAT ACTGTGGTGA 240  
 5 AAAAGCATTG TCTATAAATT TAGTAGTAAA TTCAAAGTTA ACTGAAGAAG AGATTAGTAA 300  
 CGAAaCTGTT GCACATTTAA CTGAAATAAT AACAAAAAAC AAAAGTGTTA TTCAAAAAGC 360  
 10 TTACTTGGGT CTTTCTGATG AAGGCAATGA TAGGTTGAAA CAGCAATTTT CAAGTAATAG 420  
 TTTAGCTATT TTAACAAGTG TAGATGATTG GGAAATGTTT GGAGATAAAA ATAACTTGA 480  
 AATGGTTTTT GTACCAGATG ATAGACACAT TAAACGTAAA TTGCGTAATA TTCCAAACAA 540  
 15 AGGCATsATT ATGGATCCTT TTAATAAACT AAGTCGTAAT GTTGATTATT TAGATAATGA 600  
 TGACGAGTTT TATAGCGACG ATCACCTTTA TTATAAGGAA GATGGATACG TAGCATTTTC 660  
 AGACTATTCT GTTATAGGTG GAGAATATGT AGACGGTGGC TTTTCGCCAT TAGCtATTGc 720  
 20 GrTACATATT GTCTATTTTG ATGAGGCTAA TGAGCTAAGA GTTAAGCATT TtGTCTCTGa 780  
 TTCTAATAAT GATAGATCAA ATCCAGGTAA AAnGTTTTTT GAGGCTGTAG ATAAATTAGT 840  
 AACATGGTCA AAAAaCTTAG ATATTAAAA TAGATCTTAT GCGCTTGGAC AATTtGAAGA 900  
 25 ATTAAATGAA AATAATAAGT ATCCAGGATT AGGTTTAATT AAAnGTTATC TATCAGCATC 960  
 ACCTAGAAAT TATGAATAGA TACTGGGTCT CAAAGAAATA GGAAAAGTTT ATATCGAACT 1020  
 30 GAACTGCAAG AATGCATTGA CATGGATGAA CACACGGGTA AAATGATCGC AGCTGAAATG 1080  
 ACTATGGTAT TAGC 1094

## (2) INFORMATION FOR SEQ ID NO: 813:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 930 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 813:

45 CACCTATCAT CGTCTCTTTA ATTCTATCTA TCTATTTACC CCAATCGTAA ATATGATGGA 60  
 CGTTATAGAA TACCAAGAGT TGCAGGTATn TCTATTATTT ATCTAGCTGT AGTAGGTGTT 120  
 ATTACGTTAA TTGTTAATTT ATTGATACCT ATTATTGGTT CGCAAGTAGA TAGTTTAGTT 180  
 50 AAAAATTCAC CGCAATATCT AGAAAAATTA ATTAATTCTA TTGATAAAAT AGCAAATAAT 240  
 ACGTTTTTCT CTTCGTATTA TAGTCAAATT AATGATTGGT TAAATTCTTT ACCTAAGAAA 300  
 ATACCATCTA TGTTAAGTGA ATTTACAGAT GGCTTTGGGT CTAAAATTGC AACGTTTGCA 360  
 55

CTTAAAGATG GACATCACTT CAAAGAATTT TCAACGAATA TTATGCCACC GAAATTCCGA 480  
 AAAGATTTTC ATGATCTACT TGAAAAAATG AGTGTTCAAG TTGGTTCATA CATTCAAGGA 540  
 CAAATTATCG TTTCATTCTG TATCGGTATA CTGTTGTTTA TCGGTTATTC GGTATCGGG 600  
 TTGAAATATA GCTTAGTATT AGCTAGTATT GCGGCAGTTA CAAGTGTTGT ACCATATTTA 660  
 GGGCCTACTA TAGCGATTTT TcCAGCTATT GTAATnGCTG CTATAACAYC GCCGTGGATG 720  
 CTCTTAAAT TAGCAGTAGT ATGGACTTTA GTACAATTG TTGAAGGGCA CTTCATTTCA 780  
 CCAAATATCA TGGGTAAAAC ACTTAAAGATT CATCCACTTA CAATCATTTT CATTTTACTG 840  
 TGTGCAGGCA AATTGCTTGG TATTGTAGGC GTTATTTTATG GTATTCCGGG ATATGCTATT 900  
 TTAAAAGTAT TtAGTTACTC ATTTATTCCA 930

(2) INFORMATION FOR SEQ ID NO: 814:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 814:

GTATGATTGC TGTTTTAATA CCAGATGATG GCAGTGCGAA ATCTTATGAC TATATGCTTG 60  
 TGAACCCAAA AATTGTAAGT CATAGCGTTC AAGAAGCTTA TTTACCAACT GGTGAAGGTT 120  
 GCCTTAGTGT CGATGATAAT GTTGCTGGTC TAGTTCACCG TCATAATAGA ATTACAATTA 180  
 AAGCCAAAGA CATCGAAGGT AATGATATAC AATTACGACT AAmAGGATAT CCAGCAATTG 240  
 TTTTCCAACA TGAAATTGAC CATTTAAATG GTGTAATGTT CTATGATCAC ATTGACAAAG 300  
 ATCACCCATT ACAACCACAT ACAGATGCAG TAGAAGTTaA aACACATTTT cTAATTATCA 360  
 AAgCTTAGGA TAAAtATGATG tCCTAAGCTT TcCTTTACAA CTTTTCGGAT AACCAACAGT 420  
 TAATATATCA CCTTCTAACC AAACTTTTAA TCCCTCATTA A 461

(2) INFORMATION FOR SEQ ID NO: 815:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 573 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 815:

AACGATATAA TAGAATTGAA TAAAGTGGGT GATAATGTGA CTAAAAATGA GATTAGAAAA 120  
 TACATTTTAC ATAAAATGAA GAATTTTAAT AAAGCTGAAA AGCGAAAAGC AGACACATGG 180  
 5 TTAAGAAATC AATTTTTTGC AACTGAAGAA TACAAAGAAG CAAACGCAAT TGCCTAGTT 240  
 CTTTCTTTTA ATCATGAAGT AGATACTTTT TCTATTATTG AACAAGCCTT AATGGATCAT 300  
 AAACGTATTT TTGTACCGAA AATGGATTAT TTAAATCATC AAATGACTTT TAAAGAGATA 360  
 10 TTTAATCTCA AAGATATTGA TGTCGATAAT AAGGGGATTT ACTATCCAAC TTCAAAAGGT 420  
 GAAACAACGA ATAACCTAGA TTAAATGTT GTTCCTGGTG TTGGATTTC AAGACGATGGA 480  
 15 TATAGAATTG GGTATGGTGG TGGCTATTAC GACAGGTTTT TAGCTAATTA TCAGACAAAG 540  
 ACAATAAGCT TATTATACGA TTTTCAAATA ACA 573

## (2) INFORMATION FOR SEQ ID NO: 816:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 3989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 816:

TAGTTTAAACA ATGTCTATTC TCATAGAATT TGTCCAATA AATGTAGACG ATTCACTAAA 60  
 30 CTTCTAAAAA AATAAACCCC AAATTATAAT AGTCTCAATA TTAATATATT ACAATTTATT 120  
 CATAGGATTT TTATCATTTT AATTAATAGG TTGTTATCAG GGTAAATAA ACATTTTTTG 180  
 35 TAATAGTCCT TTTTACGTT CTTTAAATA CTCAATTCTA TTCATTTGAT TATTCATTTT 240  
 ATTGTCTATA GATTTTAAACA ATGCACTTAC TTTATCTGT TCAGTGAGAC AAGGTATTTT 300  
 AAGATTTATA TTGCATAAGT TCGCATGAGT TAATTTAGCT GGTGCATTAC CTGTGACAAA 360  
 40 TGCTCGTAGT TCTTTAAAT TTAAATAATA ATTCATAAAA AACAAATTAT GATCATTACT 420  
 TTTAACTACA TGCGCATGAT TATTTACCCA GTATTGCCA TTAGCAATAA AGCTACTCGT 480  
 CTCAAACTGC CCCCATTTTG CACCATCTTC TCCTATTAGT AATCGTTCTT CATTATTGAA 540  
 45 TAAATAATCT TTTACGTAAT CAATAATTCC AGTTGCACCA TAGTAAGGGT ATAACCCCTT 600  
 TTCTCTTAAT GAAGAAGTAA TTGGTTTTCT TCTATTATTT TCAAAGATAA AGATGTCTTT 660  
 50 TATGAATTTG TTTTCCCACT CTGGATATTC TTCACCATTC TCATCTTTGA ATCGCAATTC 720  
 TTGTGTGAAG ATTTTCTGCA TATAGCCTTT TTTCTGTTGT TGAAGCAATT CAAGTTTTTG 780  
 TTCTTCTAAT TCAATTTGTC GGTGAGTTT GCTGAAGAAC TTGCCTATTT TTTGCTGTTC 840

	TCGACTACCT CCACTTTGTG CAAGGAAAAT TTTCCTTTTA CCTTTTCTTG ATAATAGATA	960
	CTGTCCAAAA AAATTATAAT AATACTCTTT TTCAATCTA ATAATACATA CATGTTGATT	1020
5	TAAATTAGCA TGC GTTTCAA CTATCGAATT AATGGCTGTT CTACCTATTG ATGCTCCTGT	1080
	AATATTTAAA AGAACATCAC CATAGTACGT TCTACTATTT TTCATCTCAT CATCTATATC	1140
	TTTACTAATA TAACTAAGT CATTAAGATT TAATTTACCA TTTCTAATAT TTTGACTCCT	1200
10	TAAAAATGGT ATGCCTTTGT TTGTATAGTT TCACTTCCA CCTTTGGGAG TCTTTCCACT	1260
	ACCTATTTTG GTAGTAAGAT TCCCTAACTT CTTCTCTTCC CATTCGCCTT CAAATCCTGG	1320
15	GAATCTCAAC TCTGGCACAT TTTTCGTTTG TGTATTACTC ATCTTTCAAC ACCCCAAGTT	1380
	CTTTCAGGTA TGCATTGATT TCTTGTTCAA TTTCTGCGAT TTCTTTGTGCG ATATTTTTCA	1440
	AATCTTGTTG GACTTGATCT AAATCAATTG GTGCTTCTTC TTCGAATGTA TCAACATATC	1500
20	GCGGTATGTT TAAGTTGTAA TCGTTATCGG CGATCTCTTG TAATGTCGCG CTGTAGCTAT	1560
	ATTTATCAAT CGTTGCTTTA CGCTTATATG TGTCTATAAT ACGTTCGACT TGGGCATCGC	1620
	TTAAATGGTT TTGATTTTTT CCTTTTCAA AATCATTGGA TGCATCGATA AATAGTACGT	1680
25	TGTCGTCTTG TTGGCGACAT TTTTAAATA CTAAAATACA TGTTGGAATA CTTGTCCCAT	1740
	AGAAAATATT GGCTGGTAAC CCAATCACGG CTTCTAAGTA GTTCTTTTCT TCTATTAAAT	1800
	AGCGACGAAT CACACCTTCT GCGGCACCAC GGAATAATAC ACCATGTGGG aGTACGACTG	1860
30	CCATGGTACC TTCATCGTCT AGGTAATGTA CCATGTGTTG AATAAAGGCA AAGTCTGCTT	1920
	TGGaTTTTGG CGCAAgCTTG CCGTAACCAC TGAATCGTTC ATCATTTTCA AATTTTGAAT	1980
35	CTGCTGTCCA TTTCGCACTG TATGGTGGGT TCGCAATAAC CGCATCAAAT GTATTGCCTA	2040
	AAAAGGCTGG ATTTTCCAAT GTGTCATCAT TACGGATCTC GAAGTTCTCA TAACGCACAT	2100
	CATGTAATAA CATATTCATG CGTGCTAAGT TGTATGTAGT ATTGTTACGT TCTTGTCGGA	2160
40	AATAACGATA CACTTGCGTT TCTTTACCAA CACGTAACAA CAATGAACCG GAACCACATG	2220
	TTGGGTCGTA CACGTGACGT AATTTATCTT TACCGTCTGT GACAATCTTC GCCAGTATCT	2280
	TAGATACTTG TTGTGGTGTA TAGAACTCGC CTGCTTTTTT ACCCGcTGTC GCCGCAAAGC	2340
45	GCCCCGATTAG GAATTCATAT GCATCACCTA ACATATCAAT TTCCATGTCA CTGTGAACGA	2400
	ATGGTAAGTC GTCAAGATTA ACCATGACTT TAGAGATTAA AGCAGTACGT TCTTTGACAT	2460
50	TGTTACCTAG TCGCGTTGAA CTCAAATCCA TATCGCTGAA CAGCCCGATA AAGTCATTTT	2520
	CACTTTCTTC ACCTAATGTA GATGTTTCAA CTTTGCGAAT CGCCGTCGCT AGATGTTCTA	2580
55	TATCGAAATC TTGCGTTTCA ATTTACGAA TCATCGCACT GAATAAATCT TGTGGCTCAA	2640

	CCCATGCTTC TTGATACGTG ATGTCTTCAC CTGACAAGGC ATCTGCATAT TCTTGTTCCG	2760
	CTTTTTTCAGA TAAGAAGCGA TAGAAAATCA AGCCTAAAAT GTAATTACGG AATTCACTCG	2820
5	CATCCATGTT CCCTCTTAAA TCATTCGCAA TCGACCATAA TTTTATATGT AATTCAGCTT	2880
	GTTGCTGACG TTGTTTTTCA GTAATAGACA TGTGATTCCT CCGCCTTTGC ATAAGTAATT	2940
	TATCTCTTTG TGTAATAGAT TTATTATAAC ATTTGGTTAT GTTGCGATGT TGATAATTTG	3000
10	GATGTTGGTG GTGGAAATTT TGAGTTTTAG TGGCGCAATT GTTATTGAAA AATTTTATAG	3060
	AAATGTTGTA GCTTTCAAAT GCTTTCAAAA TCATTTATAT TCTTAATGAT GTCAAAAAGT	3120
	TGTTCAATTCA TACATAAATA AAACCAATCA ACAATTGAGT TGGTGAAAAT CAATCGTTGA	3180
15	TTGGCTTTGA TGCATATTAA ATAATGCAAT ATATATTAAT AAATGTTAGT TATAGTATAT	3240
	TTTGTCAAGGA TTGGGTGAAT GTCTAAGTTT TAATTATTTA TCTAAATTAT CTGCAATGAA	3300
20	TTTCTTAATT TCAGGAGAGA AATAAACAGC AAATCCTCTT GTGCTTTCAC CTGATGGCTT	3360
	ATTACCGGCA TAGATTACAC CAATAGCTTC GTGTTTACTA TTTAATATAG GTGAACCAGA	3420
	GCTACCAGGC TGAATAATTG CATCCGATGA CACTATATTC CCATTCACTG ATAATACTTT	3480
25	ACCAGTTGAT TCATACATTT GTAGTTTATT TCCATTAGGA TTTGGATAAC CAATGACTGA	3540
	TATAGGTTCA TTTTCTTTAG CTTCTGATGC TATATTAAAT TTACTAGTGA AATCTTTGAA	3600
	TTTTCTACCT TTTGGTTGTG TTGATTTTTT TCAACTTGT ACAACCGCAA TATCTTCTTT	3660
30	ACCAGGATAA TCTACAATCT TAGTAACTTT ATAAAGTCCA CCACCGTTAT TATAAAAACC	3720
	ATTAGGATGT GCTTTGATTT CATCACCGAC TTTCATGTGA TAGGTAACAT GTTTATTGGT	3780
	AATGATTGTA TGATTTCCAA CTACAAATCC TGTTCCAGCG CCCATCCATG TAACACCACT	3840
35	GTATGGTGCA ACATTTGTAT TTGTAATTTG TTTAACAGTA TTTTCGGCTT TGGCTGTTTG	3900
	TTGAATACCT TCAACCATTG TTGTGCCGAC ACCAGTTATT GATGTTAAAA TCGTCAATGC	3960
40	TGCAATACTT TTGATGATTA TATTTTTAT	3989

## (2) INFORMATION FOR SEQ ID NO: 817:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 817:

CGTTGAGCAC AGTTTTAGAT AATAGATAAT CTTGCTCTAG TTGTTGCAAT GTCTGCGATT	60
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TATGCGTGTA ACGTTCAGTT ATCGTTTCTA AGGTATACTG AGATGTATTT AATTGATATC 180  
 CTTTAGATTT AATACTTACG ATGATATCAT CCATAAAATT GCTATTGATA ACATGGATAT 240  
 5 CATTGCGAAC TGTGCGGTTT GAAACATTGA CATGTTTAGC AATTTTCATTA GAACTAATGT 300  
 GCTTTGATGG ATTTTAAATA AAAAAGTGGG GTAGTTTAA GTGTCTATCA AGCATTTAAC 360  
 ATGTACCTCC TTTCTAAATT TTTCGTGTAA GCGTTTAA GGGTGTATTA ATATTATTAA 420  
 10 ACATGAGAGC TTATACATAC GTCAATGACA TTAAAGCGAA CTTTATATG ATTTTAACAG 480  
 AGTGCGAATT ATGCAAATAA AGAACAGCAG TAAGATATTT CAAATAGAAA AATATCTCAC 540  
 TGCTGTTTTT CTGAATTTAT GCATCTGGTA CTTGTGGACG TATCAGGCAA ATGATTAAAT 600  
 15 TTTAGGTGAT TGTGCTTGAG GTGTTTGTGTT AGAAGGCGTA TTGGTATTAT TTGATTATT 660  
 AGCAGGTGGT GTGTTCTGTT GTTGATTATT TTGGTTGTTT GTTGACGATT GACTGCCACC 720  
 20 ACCGTGAGTA TTATTTTAT TTGAATTTGA GTCTTTTGGC TGAGCTGGTT GCGTATTCGA 780  
 TGGTACTGTT GAATGGTTGT TAGGAACATT TGACGGTGAA GATGGTTGAT TGTCATTAGT 840  
 AACGTTATTG CCATTATTTT GATTtTTATC TGTTTGTCT GCACTATCAT CTTGTTGATC 900  
 25 ATTT 904

(2) INFORMATION FOR SEQ ID NO: 818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 818:

TTAAACatGa TAATAAAAAA TCTTTTGTTA TATCATTAGG AATATTTGAT GAACTTGATA 60  
 40 TTAAGGTTAC ATTTTGAGAA ATGGACTTAG GGATATTTCC ACTATTATTT AGTAAGAAAT 120  
 CTTTAGCTAA TAAAGATTTT CCTACACCAT TTTACCAAC AATGTGATTG ATCTGACCAA 180  
 GATAGAAATT TAAATCACAA TTGTCAACTA GTTGTGTTT TTTAACTTTT AAAGAATAGT 240  
 45 TATTTAGTTT CATGTATACA ACTCCTATGT ATAAAGGGAT TTATTACACC GATATTTAAT 300  
 TGTATTTTAA AAAATTCTTT CACATTATGT ATAGAwGTTA TAAATTAGTA TATCaACTA 360  
 TATTTtGkCT AAATGATAAA TATATCGTTA TATTTTACA ATATTCTGAA ATTTATGTTC 420  
 50 GCCTCTGAAT GCTATATCCA GTGTAATGTG TTTTGCATAT ATGAAAGCAA TTTCAAATG 480  
 TGAATATAGG TTCATTGTGG TATGACAAAC TTCATTGCTT GTCATGAGAT GGATATAATG 540



GACGGGACGT TTTTAGATTG AAAAAAGACA TATGATAAAC TTAGATTTGA AGCGATTTTT 660  
 ACTGAACTTA GAAATAGAGA TATTACATTT ATTGCTGCGA GTGGCAATCA ATATGCGAAG 720  
 5 TTGAAGTCTA TTTTCGGGGA TAGAGATATG TATTTTATTT CTGAAAATGG TGCAGTTATT 780  
 TATAATGGCA ATGAGTTATA TAATTATAAA AGCTTTAATC GTCAGGTGTT TCAACAGGTT 840  
 GTCGATTACT TAAATATGAA GCAAAGTATT GATCAACTCG TCATCTGTGG TTTGAAAAGC 900  
 10 GCGTATATTT TAAAACATAC TTCTGAAGCG TTTAAAGAAG ATACGAGATT TTATTATCAT 960  
 CAGTTAAAAG AAATTGACAG TCTACAGCAA TTACCTGAGG ATGATTATGT CAAAATAGCA 1020  
 15 TTTAATATTA ATCGTGAGAC GCATCCGAAT GTTGACGAAG AAGTAGCAAC GCAATTCAGC 1080  
 AATGATATTA AACTTGTCTC AAGT 1104

(2) INFORMATION FOR SEQ ID NO: 819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 819:

CCCbTTTTAC GGATTAAaGG CTTTTTCCTA TTTAAACCT ACGGCATT TT CTTTTCAACC 60  
 30 ACGGCGGCTC CCATATGGAT GGTATnGGGA TTGGGGTTTA TAAAATGGGG ATTGGAAATG 120  
 GTCCATCCTA AATACTCAGT TTAGTGCTTA TTTCCTTTAG TGCTGACGAA TAAATATGAT 180  
 35 CTAACCTCTAC GAAACCTAAT AACGTATCAA ATGCTTCATC ACCATTTTCA AATTTACTTA 240  
 AACTATTTTT AAAATCATGT CGCAAATCCT CTAAATATAG TGATGGTTTT CGATCTACAT 300  
 ACATTTTTAT ACTAACCTCC GATATATAAT CATCTTTATT GTACCTAACA TTTTATTAAG 360  
 40 ATAATACTAA TACACTATCG AACTTTGGGC TGATACTGAA ACAGCACAAA GAAACTCAAA 420  
 CAATTCGAAT TATGTATCAA AACCTTCAAT TACAGGAAGT GATTTTAAAA TGATTTAACG 480  
 CAAAAAACA CCTGTTACCG TTATATAGGT ACAAGTGCTT AATTGATAGA GATGTTATAC 540  
 45 GTCITTAAAT GATTCCACAA CTTTTGGATG TGGACCATCC ATAAGCGGTT CTCTTTGTCG 600  
 AACGCCACCA CTTTGTTGTC CAATTGATTC GCTATCAAAG TACGATTTAT CTTGATTGTA 660  
 50 TTGTTCTTGA ATATGTTCTT CATTATCAGT TGTTGCATAT TCACTATCCA CCTCTGTTTT 720  
 TTCCATTGTT GCTGTATGGA ATTGTACGAA GTTCTCTTCT TCTAATGCTT TGATTTCTTC 780  
 TTTCGATAAC GCTCGATACC AATCTTTCGC TTTTTTCGCC GCAaTAGGAa CAaCatCTTT 840

TACTTCAAAT TCTTTCCATT TTTCGGGGTA ACCTTTCATT GTAAAGGGCA TTCCCTTAAC 960  
 CTCCAATATG TTATAATTCA TGTTATATAC CACCATAATT ATAAAATGAA ACATATTAAA 1020  
 5 CACAATTTTT TAGACTCCCG TCATAATAAC TTCAGACAAA CGTTAGTCTG ACCTGATAAA 1080  
 TATTTAATTT TAAACGTTCT TGTCTCTCTC ACGAAAACCA TTGTGTTGAA TATTCATCAT 1140  
 TGCTGATTGA ATATAATTAT ACTGTGGTAA ATCTGGTAAT ATCTTTATTT CTAATTCTGT 1200  
 10 ATTTAATTTCG AAATGCTTAG CGATGTTTTTC AAATATTGCT AAATACTCGC CCATTAATTG 1260  
 TTCATTTATT GTAAGTCTAT CTTCATTAGC CATGGCTCTA TTTAACATAA AGCTAATTTTC 1320  
 15 TTCTAATGCG AATAAGCTAG GATAATAATT TTGAATCAAT GTCTTATCAC TAAATAATTC 1380  
 ACCATTAGCT GCATTATAAA CTTGCGTGCA TGTTATTTAA TTTGC 1425

(2) INFORMATION FOR SEQ ID NO: 820:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 820:

nCGnCCCTTAT ATATGTTTTT CATGTCCTAC AAAAAACGAA ATATTCCAAT TGCCTATATA 60  
 30 CAGATATTCA TTAATGACAC ACTCAATAGC AACCATnACA ATATTATGTT ACCTATTTAA 120  
 ATGAAATAGT TCTTTTAAAG AAATACATTT TTCACATATT AATCTATAAT CAAAATCAAC 180  
 35 TGACCGATAT TCTATAATTT ATGATTAAAA TAAGTTATAA TATAATAGTA AAGATAAAGA 240  
 TAGAGGTGGC TATAATGTGT GGA CT TAGAA GTATAACATT AGGTACaACA AATATAGAAC 300  
 AGACaAAACa TTTCATGGTT GACATATTAG GATTAAATTA TGAAGAACTT CTTGAAAAC 360  
 40 CAATTCGTTT CGGCGATGCA GATATAAGCC CAGGAACAAG ACTTCAATTT ATACAAGTTC 420  
 CAAGTGAGCA ATTAGAAGAA TCTCACTTTG TGGGTATTGG ATTACGTACA CCAACTGACT 480  
 CAGGTTTAGA GGAGTATGCG GAAATATTAT CGAATAAGGA TATTCCATTT ACAACAGTTA 540  
 45 AAGAATTAAA TGGCAATAAA TATTTTCAGTC TCGAAGATAA CAATGGTCAT ATTTTCTCAA 600  
 TATATTCAAA CGAGAATAAT TATGGCGTTG GTTTAGGTAT GCCTTCTTyT GAGAGTGCGG 660  
 50 TCAATCCGTT ACATCAAGTG CAAGGTTTAG GACCAGTGAT TCTTAAAGTG AATCATGTAG 720  
 ATATTACAGG TCAAATTTTA ACAAATATAT TCGGACTTGA AGTATTTGCA GAATACCAAC 780  
 CCTTCGACAA TGCTGACTAT CATGTCCAAG TATTCAAAGT TGGAACGGGT GGTCTAGGTG 840

ATCAAGTTGA GTTTGAAACG AAAGATGCAG ATTTCTTTAA TCAAGCGAAA TCGCGCTTAG 960  
 ATGAAGTGG AATACCATAT CAAACGCTTG AGCAAGATGA TATTGAATCA ATTAGAaTTA 1020  
 5 CTGAAAACAG TGGATTATCG TTTATATTCA CTTTACAAAA ATAATTTTTT TACGATAGCG 1080  
 AGGACAAAAT TTATGTTACA TGAAACTTGG AAAGAACGTA CACCAATCAA GAAAGTAGAA 1140  
 GTCATTAATA CAGATGCAAA GAAAT 1165

(2) INFORMATION FOR SEQ ID NO: 821:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 821:

TCGCCCAATT ATTATGAAAT ATTCAATACA GTTTATTGAT CAAAAACAA AAATCCATTA 60  
 TGAACCTTGT CATCACGAAT ATTAAGTAC GTTAGATGGA CCTCTTTAAT GATAGAACAA 120  
 25 TTAATAAATA ATGCACTTAA GTATGCGAGA GGTAAAGATA TATGGATTGA ATTTGATGAG 180  
 CAATCCAATC AATTACACGT AAAAGATAAT GGTATCGGTA TTAGTGAAGG nACTTGCCTA 240  
 AAATATTTGA TAAGGGCTAT TCAGGTTATA ATGGCCAGCG CCAAAGTAAC TCAAGTGGGA 300  
 30 TTGGTTTATT TATCGTAAAA CCAATTTTCA ACACACACAA ACCATCCGTT TCCGTCGTAT 360  
 CTAAACAAAT GAGGGTACAA CChTTACGAn TnCCATTTC 400

(2) INFORMATION FOR SEQ ID NO: 822:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 760 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 822:

TGATATAATA CTTTTGTAAA GAAAAGCATG TGTGGGAGGT ATGACCTGTA TGTCGAACGA 60  
 AATACTTATC GTAGATGATG AGGATAGAAT CAGAAGATTA CTAAAAATGT ATTTAGAAAG 120  
 AGAATCTTTT GAAATCCATG AAGCAAGTAA TGGCCAAGAG GCTTATGAAC TTGCAATGGA 180  
 50 GAATAATTAT GCTTGCATAC TACTAGATTT AATGTTGCCT GAAATGGATG GTATCCAGGT 240  
 GGCAACTAAA TTGCGTGAAC ATAAACAAAC ACCGATTATT ATGTTGACTG CTAAAGGTGA 300

TTCACCAAGA GAAGTAGTCT TAAGAGTTAA AGCACTTCTA AGAAGAACGC AATCTACAAC 420  
 TGTAGAACAA AGCGAACCTC ACGCACGTGA TGTGATTGAA TTTAAACATT TAGAAATAGA 480  
 5 TAATGATGCA CATCGCGTAC TTGCTGATAA TCAAGAAGTT AATTGACTC CTAAAGAGTA 540  
 CGAATTATTA ATATATTTAG CTAAACACC AAATAAGTA TTTGACCGTG AACAATTATT 600  
 AAAAGAAGTT TGGCATTATG AATTCTATGG TGATTTAAGA ACAGTTGATA CTCATGTTAA 660  
 10 ACGcTTAGAG AAAAGTTAAA TCGTGTGTCT AGTGAAGCTG CGCATATGAT TCAAACAGTC 720  
 TGGGGCGTTG GGTATAAATT TGAGGTTAAA TCTAATGATG 760

## (2) INFORMATION FOR SEQ ID NO: 823:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 823:

CAAAGGAAAT TGCACAATTA GAAGACCGAT TACGTTACAG CTTTGAATGG GGGCTAATTG 60  
 TTGATATTAC GCCACCAGAT TATGAACTC GAATGGCAAT TTTGCAGAAG AAAATTGAAG 120  
 AAGAAAAATT AGATATTCCA CCAGAAGCTT TAAATTATAT AGCAAATCAA ATTCAATCTA 180  
 30 ATATTCGTGA ATTAGAAGGT GCATTAAACAC GTTACTTGC ATATTCACAA TTATTAGGAA 240  
 AACCAATTAC AACTGAATTA ACTGCTGAAG CTTTAAAAGA TATCATTCAA GCACCAAAAT 300  
 CTAAAAAGAT TACCATCCAA GATATtCAAA AAATTGTAGG CCAGTACTAT aATGTTAGAA 360  
 35 TTGAAGATTT CAGTGcAAAA mAACGTACAA AGTCAATTGC ATATCCGCGT CAAATAGCTA 420  
 TGTcTTGTcy AGaGAGCTTA CAGATTTCTC ATTACCTAAA AATTG 465

## (2) INFORMATION FOR SEQ ID NO: 824:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 824:

CACCGCGGTG GCGGACGCTC TAGAACTAGT GGATCCCCCG GGCTGCAGGA ATTCGGCACG 60  
 AGGTAAGGAG GTCTCTGTAC CATGGCTCGT ACAAAGCAGA CTGCCCCGAA ATCGACCGGT 120

GGAGGGGTGA AGAAACCTCA TCGTTACAGG CCTGGTACTG TGGCGCTCCG TGAAATTAGA 240  
 CGTTATCAGA AGTCCACTGA ACTTCTGATT CGCAAACCTC CCTTCCArCG TCTnGTGCGA 300  
 5 GAAATTGCTC AgGACTTTaa AACAGATCTG CGCTTCCAnA GCGCACTATC GGTGG 355

## (2) INFORMATION FOR SEQ ID NO: 825:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1099 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 825:

TTCACTTGGC TTGTTGAcTG ACTTGTAaAT GATGATGTGC TTTGTGAATC GGATTCGCTC 60  
 20 GTGCTTGTAAC TTGTTGAGTT TGAGGCACTT TGGCTTGCTG AGTTTGAGTC TACTCCGCTT 120  
 TGATTCATTG AGGCACTTAG TGACAATGAT GTACTCGTTG AGTCAGACAA ACTTGTAaCTC 180  
 GTTGACGTAC TTGTACTTCC TGATGTTGAT TGAGACATAC TTATGCTCAT TGATGTTGAA 240  
 25 TCGGATTTAC TTCACTTGA TGATGTTGAG TCGGATTCAC TTCACTTGT AGAACCACTT 300  
 AATGATGTGG ATGTACTAAT GGAATCAGAT TTACTTGTAC TGATTGAATC ACTTGTCGAC 360  
 ATTGATGTAC TTAATGAATC AGACTTACTA TCACTTGTGG AATCACTTAA TGATGTTGAC 420  
 30 AAACCTGTAG AGTCAGACAA ACTTGTAaCTC GTTGACATAC TCAGTGATGT TGAAACACTC 480  
 TCGCTCTTAA ACGTTGACGT TGATTCACTG ATACTTGTGC ATGTTGAAAT GGACGTAaCTA 540  
 CCACTTGTG AATTACTTAA TGATGTTGAT GTGCTACCAG ATTCTGATGT ACTGTCTGAT 600  
 35 AATGACGTAC TCTCACTTGT CGAACTACTC ACTGACTCTG ATGTTGATTG AGACGTACTT 660  
 TCACTTAATG ATTCACTTAA AAAGGCAGAT GCACTTTGTG ATTCTGAATC GCTAGTACTA 720  
 40 TTTGATTCAC TTAATGATAT AAACGTGCTC TCTGAAGCAG ATATTGCTTC ACTTATAGAG 780  
 TCGCTCGTTG ACGTTGATTG ACTTATTGAA TCAGACTCTG ATGTACTTAA GCTTGTGGAA 840  
 TCACTCaTAG ATGTTGaTGT ACGTTCTGAA TTACTTGTAC TTAACGATGT CGAAGTACTT 900  
 45 ACCGAACCAG ATGTGCTCGT AGAAGCACTT TgTGATATTG ATTCACTTGA TGCAGTTGAT 960  
 GCTGATTTGC TATCACTCGT TGAATCACTA AACGACGTTG ATATGCTCaT TGAATCGGAT 1020  
 TGACTTGCAC TCaTGAACC AGACGTACTT TGTGATTCCG AAGTACGTAC TGAAGCACTT 1080  
 50 GTCGACGTTG ATGTACTTG 1099

## (2) INFORMATION FOR SEQ ID NO: 826:

(A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 826:

10 TATGCGTATC CTGATAGTCA CTTTGATTTT GATATGGAAT TAGCGAAAGA GCAATCTCAA 60  
 GACAATCCAG TTTACTATGC TCAATATGCA CATGCGCGTA TTTGTTCAAT TTTAAAACAA 120  
 GCGAAAGAGC AAGGTATTGA AGTGACTGCT GCGAATGATT TTACAACGAT TACTAATGAA 180  
 15 AAAGCGATTG AnTTGTTGAA AAAAGTAGCT GATTCCGGAnc CTACAATTGA AAGTGCTGCT 240  
 GAGCATAGAT CGGCACATAG AATTACTAAT TATATCCAAG ATTTAGCCTT CTCATTCCAT 300  
 AAATTChATA ATGCTGAAAA GTGTACCAGT TGGTATTG 338

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## (2) INFORMATION FOR SEQ ID NO: 827:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 838 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 827:

30 GTATTTTCTT TCGCGAATGA TTTTATTACT TGAATACCAC GAATAACCTC CAATACCTTT 60  
 TCCACTAATT GGTTTTGTAC ATTATGATAC GcTGCGCAT TTTGTCGACT CTTTCTTTCT 120  
 35 AATAATTGAA TCGCAAAAAA TGATAGTAAT ACGCCAATGC ATGCTAATAA TGATACTTGC 180  
 CACGAAACTA CAAGTAGAGA CAATATGAGT ACTGTAATTA ATATGTATCC ATTAACAACA 240  
 ACGTCCACCA TTTTCATAGC AAAGTTTTCT AAAAAGGTTA AATCTGTTGT TACTATTGTT 300  
 40 GTTAACTCAT TTGAATGATG CGAATTAAAA TAACCTAACC TTACATTTTT CAATTTATCC 360  
 CCTATATCTA AACGTTCTTT CGCACTCATT TCATAAGCGA TGCTCTCATG GCTTTTGCTT 420  
 TTGAAATATG CTGTAATAAA TCGTCCAATC ACTAATAAAA CCATGATAAT TACAACATTC 480  
 45 AATATATCTT TCATATAAAT AGGTTTATGA GATAGCACAT TATTAAATAT TTTTGCAGCT 540  
 AAAAAGATAG GTAACGCAAT AAAAATAGCA TTTAAAAATG ACATGCTAAA TCCTAAAATC 600  
 50 ATTCTTGCTT TATATGGTCT TATCCAGTTT AAAATTTTAA ATGTAATTTG AAACATATTT 660  
 GACCTCCTTT TCTCATTAGT TTAATTATGT CCAGTATTGA TTCCCCAATC TTTTGTATGC 720  
 ATGTGCGTAT CCCACATTTT CTTATAATTA CCGTTTAATT TTAGCAATAA GTGATGTGAC 780

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## (2) INFORMATION FOR SEQ ID NO: 828:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 898 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 828:

TCCnAAAGAA GAAATAaCAT TATCATaAAA TCCATTGAAT ATAAATTCAG TCATCCCCTC 60  
 TGAACtCTC CATAAATATA ATGGTGAATA AGTATTTGTA ATGCAATTAG TAGTTGTTTG 120  
 ACTTATTAAA TAAGCTTTTA TAATTAAATT TTTAAATCCA TCAGTCTTAT AACCATTTAA 180  
 TCGAACTCTA TCTCTAATTA TTTCCATATT GTAATCACTA GGCAACTTAA CATGATATTG 240  
 CATTGCATGC ATTTAGCATA CCCCCTTTTA TAAAAAGGAT AGCAATAATA AGTAAAATCT 300  
 CATATTATCC AATTGTGATA TAGTTATCAT AAAAAGTGAT AGGTGATTAA ATTGAACTTT 360  
 AATGATTTGG AAATTTTAT AACTGTATGT GAAGAAGCAT CTATCAATAA AGCTGCAATT 420  
 AAACCTAGAT ATGCACAATC TAATATATCT CAAAGAATTA GCAAGCTTGA AAATGAATTA 480  
 GGTGTAGTTT TGCTTTTATAG AAATCAAAAA GGTGCTAAGG CAACTAAAGC AGGCGAAGAA 540  
 TTCTTAGCGT ATAGCAAAAA AGTATTAAGA GATACAGAGA CTATAAAAAA TAAAATGAAA 600  
 AATAATACTA TGTCTATTTT ATGCTCAGAA CTGTTATTTA ATTATTTATC TGAGAGCGAA 660  
 GAAATTATGA TGTCGAATAA CTCAATTAAT TTTATTTCTA GTGGAAATAT TAGAAAAGCT 720  
 ATAGAAAAAA ATAATTATGA TAAGGTTATT TCATTCATAA AAaTTAACGA CTCAAATTAT 780  
 AGACTTAGTA ATGTTGATAC TATGaaAGTA ACGCTTTACA GTAATGGAAG TAATTATGAT 840  
 AAAGAGGCTT TACTAATAAA TAAAGATGAG TTTGGTCCTT TAAGGnAAAT AACTTTAG 898

## (2) INFORMATION FOR SEQ ID NO: 829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 829:

AGTAGGAGTC ATAAATCGn ATTTCAAAG CAATTAATGC AAAATACTGA GTCTACAGTG 60  
 CTATTTGCGA AAGCGTCCaT ACGAAgTTGA GcAATGCTAA TAATAATGGT CTATCAAAAA 120

AATATGTTGA TAGTTACACT GATTCTCTTA CTGGAGTAAC AACTTCTGCT TTTTAAATA 240  
 AAGATACAGG CAAAGTAACT CTCGGGATGA CTGGGACTAA TTTACAAGAC GAAGCCTTTA 300  
 5 AAAAGTTAAA AGAAGGTGAA TTTTCAAGAC AAAATGTTAC CAATGCTTTG GAAACAGTTA 360  
 AAGATGGATA TGCAGATCTT AAAATATTAT ATTCTCCTGC ATCTGATCAA AACTATAGAT 420  
 10 ATGCGAATAC ACAAGAATTT ATAAATAAAA TAAAAAGTAA GTATGACATT GATTTTATTA 480  
 CTGGACATTC ACTAGGTGGA AGAGATGCGG TAGTTCTAGG AATGAGTAAT GGTATTCCGA 540  
 ACATTGTGGT TTATAATCCA GCTCCTATTT CTATAACTAG TTTGAATCCT AATCCCCAG 600  
 15 ATGGAAAACG TTTATTAGAA TTATATAAAA ATTATAAAGG TAATATTACT AGGTTTGTG 660  
 CAGAAAATGA TGCATTGACA GAAAATCTGA AGAAATATAA GCATTATGTT TTTTTCGGTA 720  
 ATGATAAAGT CTTTAAAAAT GGTAAAGGTC ATGAAATGKa AGGCTTCTG ACCGAAGAAG 780  
 20 AACAAAAAGC tATAAAAn 798

## (2) INFORMATION FOR SEQ ID NO: 830:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 830:

AATATCAATC TCTTCATAAG CTGAATTATT TTCATGCACT TCTTGATGTG ATGATTTGTC 60  
 35 ACGAACnGCT ACAACTAACA TTTTATCGTC TAAAATAAGT TGTTTATATT TTTCTAATTC 120  
 ATCAGGCGCT AAGTTGTAGC GTGATAAAAC TGCATGTTCA CCATCTTCTC CTGTTAACAG 180  
 TTTAGTCATT CTATCACTAA ATGTTCCACT TGTGAGATA AGGGGAGATT TCAGAGTCGT 240  
 40 GTAAGTCATT AGGTGTAATT TACTTTTACT AATAATTGTT AGCCTGATCT AAATAACTTC 300  
 AGATTCTTTG ATTGATAnGT GnATAATCGC AGTGCATTAC ACAGAATACT GCCAAGTGCG 360  
 45 CCCTTAAAT TGTTATTAnC TTACCTCTAT ATAAGAACCC 400

## (2) INFORMATION FOR SEQ ID NO: 831:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



AAGTCTGCAT GACTTTTATT TGCAAGTTCG ACTGCTTGAT CAAAAGCGCG ATGATCTTCA 60  
 GGATTAGCAC TTTGAACTGA GCTGAAATTC GGATCAGGTT TACATTGTGC TTCTACAAGA 120  
 5 TTAAATTGAT TGAAATTCAA AGATTGTAAT AACTCAGGTA CAATCGGAAC ACTTGTACCA 180  
 TGCAAACTAG TGAACACAAC TTGTAAATCA GATTTAGGAA TATAGCCAAT CATATTTTGA 240  
 ATGTGTTTCA TATAGTCATC AGTTACAGAT TTCGGAAAAG GCTTGaTATA AGATGTATTT 300  
 10 TGTTTAGAAA tAGGTATATC AATCTGTAAT GGATCGCCAA CTTCTTCGAT ATAACGACTT 360  
 GCAAGCTCAG ATGCATCAGT CGATAATTGC GCACCATCAG AACCATATAC TTTGATGCCG 420  
 15 TTATAGTCTT TCGGATTATG ACTTGCTGTA ATCATAATGC CAGCAGTAGT ATTAA 475

## (2) INFORMATION FOR SEQ ID NO: 832:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 724 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 832:

CTTGAATTGA AGGATACGCA AATGATGCAT AATCAGCTTC TGTATAAAGC TGTAATGTAA 60  
 TGTCATCAAG GTCACCTTTT CTAACAAGCA CCTTATTAAT AGAAGTATGA TTCGCTTGCC 120  
 30 AAGTACCTTG ATTATTTTGT TCTAAATGAA TGACTTCGCC TAACGATTTT AACGTAATAT 180  
 CTGCACGCTC GTCTTCGCTA ATAGTATATG TCTTACCATC TCGCAAATTG AGCATCTTCA 240  
 35 ATTGTTTGTT ATATTTTATA ATCAATTTAT GCATTGTCTT TGCCTCAGTC CTATACTATT 300  
 TTTTCTTTT AGCTTCTTGG CGTTTTTCTT TATCTTTTGT TGCTTGTTCT TTTTGTCTT 360  
 TTTCTTCTC TTCTTGTTGC TTTAATTTCT CATCTTTCGC TTTTGCTTTC TCTTCTTCAG 420  
 40 ATTTGCTTTT TTCATCTTTA ACTTGTTTTT CTTTGTCTAA AATATCTTGC AATTTATCGT 480  
 TATACTTTTT CGTTTCTTCA GAACGTTTAT CATTCGATAA ATCTCCGTTA TTTTAAATCT 540  
 CATTAAATTT ATTAATCAAC GCTAACTTTG TAATATCGTT ATCATCTAAA TAAGTGGCAA 600  
 45 TATTAATCGC TTCATCAAGA TGTCTTGTC CTAATTCCAT CCAATATAAT AAGTAGTCTT 660  
 TGTTTGAATT TGGTGTGACA TTATTAAGTA AATTTTCTTT CGTATCTGTn TCTAAACCTn 720  
 50 GTTn 724

## (2) INFORMATION FOR SEQ ID NO: 833:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 994 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 833:

	AGCAGTTTGG CTCGTAGAAA TCTCCCGTCT CTATTCTATG TATTAAC TTT TATTATATTT	60
10	GTTATGATAC TATCGATATG AAAGCGTTGT CAATGGTTTT TGTA AAAATT TTGTCAAATT	120
	TAATTTTTCA AGTCTTTATA AAAGTAGTTT AATTTGAAAA CTAGAAATAC CAATCCTAAC	180
	TAATTTATTT ATGACGCTCT TTTGTTTAAT TGACATTCTT CAGCCATATT TTTTATGACT	240
15	AGTTGCATTT TTTACTAATA AACACCTCTA AAAC TTTAAT GATTTTAATC GTTTTAGAGG	300
	TGCTAATTAT TTTATTTGAT TATTTTTTGT TTGATACCTA CTGCATATCC CATATGAAAA	360
	CGGCTTTTTT ATTATGTTAT ATGACTAAAT CTCGTGAAAA ATGAAATTTT TGCAGACTTA	420
20	TGATTTACCA AAGTTTATCA TAACTAGTAG TTACATATTT CGCTCCATTT TTAACAGCTT	480
	CATTGACTTC ATCTATTGTA TTAATTAGGC CACCTGCAAT GACTTGTGTG TTTGTTTCTT	540
25	TCTGAATATG ATGAATCGCT TTA CTGCAA CACCTGGAAG TACTTCAACA AAATCAGGTT	600
	CAACTTTTTT TATCAAATCT ATACTGCGTT TCAATGCTTG ACTATCAATA ATAAATACTC	660
	TAAAAATCGT TAAAGTATTT AATGATTTAG CTTTTTTTAT TACTTTAGAT TTAGTCGATA	720
30	CGATACCTTT TGGCTTGAT TGCTGAATAA TAAATTC ACT TGCAAATTCA TCGTGGCTTA	780
	AACCTTTTAT CAAATCTATA TGAATAAAAC ACTCTATATG ATTTTGCTTC AGCAATTCCA	840
	TAATACTTTT TATATGTCCT ATATGCATAT CTAGAAGCAC ACACATTTTA TAGTCTGTnT	900
35	TAATCCAGTT TCTCTAAATC nTTAATGTTT CCTATAAGCA GGCAATATGT TGTTAATTCA	960
	CnGATCCAT CCTCTCTACA TCACAGCTT AAAT	994

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(2) INFORMATION FOR SEQ ID NO: 834:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 783 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 834:

50	Tc nACAAAGT CGGTATTAGG CTATGGGCCA TTnACTATT ATA ACTAATC GGAAATATAC	60
	CACATAACAT CATTATTGAG TTGATTCTAT CATT TGCTT ATTAGGGTTT TTTATCATAA	120
55	TGATTTGCAT TTTGCTACTA GTTTATAAAA TGATTAGGAA CTATGATCCA AACACTATAG	180

ATTTAGTTGT AAGTGAATTT TGGTTTGTGT TGTTCATTTT TATTACAAAA GGACGGCGTC 300  
 ATCATGGCTA AGAAAGTTTT TATTATGGAT AGCGTAAAGA CAATAATTGG TACGTTGCTT 360  
 5 ATAGCTTTAG GATTACAATT TTTAGCTTAT CCAATTATTA ATCAACGAGT AGGTAATGAA 420  
 GCGTTCGGTT CTATTTTAAC GATTTATACA ATAATAACAA TCACGAGTGT TGTATTAGGC 480  
 AATACGCTTA ACAATATACG mTTGATTAAAT ATGAATCTAT ACAAATCCAA TCATTACTAC 540  
 10 TGGAAATTTG CATCGATACT TTTAATCTCA ATTCTGATTG AGAGTATAGC TTTAATTATT 600  
 GTATTTCTTT ACTTTTTTAA TTTGAACATC ATCGATATTA TCTTTTTAAT TCTACTTAAT 660  
 15 ATTTTAATGT GTTTAAGGAT TTATCTGAAT GTATTTTTTA GGATGACTTT AAAATATAAT 720  
 CAGATTTTGT ATATTGCTCT TATTCAATTT TTAGGTTTGC TGATAGGACT ATTTCTATAT 780  
 nAT 783

20 (2) INFORMATION FOR SEQ ID NO: 835:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 794 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 835:

30 TTACCTAATT TTTCAATCaT AAGATTCCCC CTATTGTTTA AACaTAAAAA TATTATaCGA 60  
 TTAAGCACGA GmCACTTCAA TATATTTTTT AGAATATTCT TATAAATATT AATATGATCA 120  
 35 TTTCACTATT TAAACACGTT TAATATTAAA ATAAGTTATT CATATAAACT GGTGCTGTTT 180  
 GATCCAATTG CAGACTTACG AGTCATTGAA AAGTCTCACA AACTATTGmA AGTAAaLATC 240  
 TTAAAATAGA AAGTGAATGG TTAATTTAAG TATATTTmAA AAATATTAAC CTTTTTAAGC 300  
 40 ACTGCTATTT AGGATATACT AAATAATAAC TAAGTTTAGA AAAATAGGAG GAACATCGTT 360  
 TATGTTAAAC AAGGTTTGGT TCCGAAC TGG CATCGCTCTG ATTATGCTGT TCATTCTCAT 420  
 CAACTATTT ATGGAAGTGC ACGAAGTATT TACTCCAATA GCTACAATCA TCGGTTCTGT 480  
 45 ATTTCTTCCA TTTTAAATTA GTGGTTTTTT ATTTTATATC TGTCTACCTT TTCAAACTT 540  
 ACTTGAAAAA GTCGGTTTTT CAAGATGGGC TAGTATAACA ACAATCATGT TAGCTTTGTT 600  
 TGCTATTATC GGCTTAATTG TTGCGTTTGT TGCACCAATC ATCATTTCAA ATATCAACAA 660  
 50 TTTAATTAGT CAGACACCTG gCCCTACAAA AAGGAAGCAG AGCAAATTAT TAAATTCGCA 720  
 CTGGCTCAAA TGGnTAAATT ACCTGGAGGA TGTAACCAnG TGGATTACCA ATATGGTAAA 780

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## (2) INFORMATION FOR SEQ ID NO: 836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 836:

TGTTTATACT GTGCCTGAAT TAGAAGAGGT TTTAACACCT ATGAGACAAG ATGGAACCTCG 60  
TGATATTTAT GTTAATTTAG AAAATGTGAG TtATATGGAT TCGACAGGTT TAGGTTTATT 120  
CGTAGGTACA TTAAGAGCAT TAAACCAAAA TGATAAAGAA CTATACATTT TAGGTGTGTC 180  
AGATCGTATC GGTAGACTAT TTGAAATTAC TGGTCTTAAG GATTTAATGC ATGTTAATGA 240  
AGGAACGGAG GTCGAATAAC ATGCAATCTA AAGAAGATTT TATCGAAATG CGCGTGCCaG 300  
CATCGGCAGA GTATGTAAGT TtAATTCsTT TAACACTTTC tGGCGTTTTT TCGAGACTGG 360  
TGCCACATAT GATGATATTG AAGATGCCAA GATTGCAGnT 400

## (2) INFORMATION FOR SEQ ID NO: 837:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 837:

ATTGATCCAT TTTGCGGTC GGGTACAATA GCTATAGAAG CTTGTTTAAT TGCTCAAAAT 60  
ATCGCACCTG GTTTTAATCG CGAGTTCGTA TCAGAGCAAT GGAACATCAT GCCAGCAAAT 120  
ATTTATGATG ATTACCGTGA TGAAGCGGAT AAGATGGCTG ATTATGATAA AGAAATCGAA 180  
GTATATGCTT CTGATATCGA TCCAGAAATG GTAGAGATTG CTAAGCGTAA CGCTGAAGAA 240  
GTTGGGTTGT CTGATATTAT TAAATTTAGT GTAAAAGATG TCAATACATT AACAATTGAT 300  
ACAGAAGAAC CGGTGGCGTT AATTGGAAAT CCTCCATATG GTGAACGTAT TGGTGaTCGT 360  
GAAGAaGTtG AAGAAaTGTA CCGTTATATT GGTAAACTAA TGAAACAACA TCCATTTTtA 420  
TCTACATACA TTT 433

## (2) INFORMATION FOR SEQ ID NO: 838:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 926 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 838:

	ATTGGGCCAA CTAATCCTGT ATATCCAAAT CCAGCAGACA ATGGTGTTC TTTAACCTGA	60
10	AGAACGTAAG CAATGATTCC AGTAATTATT CCATTTATAG TCAATGGTAT CGAAATAATT	120
	AAATTTTTC AGTAAACTGG GATCATCATT TTTGCAGCTC CTATGAGTAA AACTGCATTT	180
	ACACCAATAG AATTGACACG CAATGAGCCA AATAAGAAAG TAACACAGGC AGCCACTATA	240
15	CCTAGGTTTG CTGCTCCACT TCCTAGTCCG TTAAACTAA TCGCAGTTGC AATCGCTACT	300
	AACGATATTG GTGTTACCAT TAATAATGAA AATGCCACAC TAATAAGTAT AGACATTAAC	360
	AACGGATTTA AGTCTGTAAA AGAATGAATT ACATTTCCAA TTGCTTGAGT AATTTTTCGA	420
20	ATGTAAGGTA ATGTGATTAG ACCGATACCC CCACTAACGA TAGGTACTAA AACTGGTAAT	480
	ATAATTAATT CAAAAGATCC AAGTTTGTTT TGTAATACCA TATATATAAG ACATGCAATA	540
25	ATAACAACCA AACTCGTATT TATAATGtCa CCTATACCTT TTAACATAAA ACTATTATTG	600
	CTATATACAA CAGCACCTGA ACCAATCATA GCTGATGTAC CTACTATAGC AGCACCTGCA	660
	CCATTAAATT TAAATTGATG AGCAGCTAAA ACCCCAATAA TAAATGCCAT AAATGATTGA	720
30	ATTAGTATCA CTAACGTATA CGTTAATTCT AAAATTTCAT TACCACTTTT AAATATTTTt	780
	AATACTTCAC CTAATAAAGC ATTCGGAACA AGTGCAATAA CAACACCAGC ACCAATAGAA	840
	TTTAAAATCT TACTGAAAAA CTGTTTATTA TCAGCATTAT TTGCGTTACT CATAAACGAC	900
35	CTCCAATTTG AACATTAnAC TCATCA	926

## (2) INFORMATION FOR SEQ ID NO: 839:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 839:

	CTTCGAAACG TACTTGGTCA TTCCCTTTAC CAGTACAACC ATGTGCAATA CCTACTGAAT	60
50	TTGTTTTCTC AGCAATCTCT ACTAATTTTT TAGCGATTAA TGGTCTTGAT AAAGCTGAAA	120
	CTAATGGATA TGCATTTTCA TACATTAAAT TTCCTTTGAT TGCATAACTT ACATACTCAT	180
55	CACTAAATTC TTTTGTTGCA TCAATAATAT GACATTCAAC TGCTCCCATA TCTAAAGCTT	240

CGTATCctTT GTCGATAAGC CATTGAACGG CCACACTTGT aTCTAGtCCt CCKGAATATG 360  
 CTAAACAAT TTTCTCTTTC ATAAAATTCA CCTCATTGTA 400

(2) INFORMATION FOR SEQ ID NO: 840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1043 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 840:

GGATCGCGGT GTTGTGCTTG ATATACTTTG TAGCGATAAC GTTTACCTAC ACAATCATAA 60  
 CGACAATGAA AATCGTCATC GACTGTAACT ACATTGTTGA CATAAATATC ATCAGGTAAC 120  
 GTTCGGTTCA TTGCATATTG CCATTGTGAC ATAGGTATAT TCAGCTCTGT GTCGAAATGA 180  
 AAGTATTGCT GTATCGCATG TACACCTCTA TCAGTCCTAC TTGAAGGATG GATTCTCACA 240  
 TGTCTTTTAT GCATGCGTTG TAATAGCTTT TCAAATTGTT GCTGTACCGT TCGACCATTT 300  
 TGTGAATTT GAAAACCTAG AAAATTATTT CCTTGATACG CAATTTCTAC TAATATACGC 360  
 ATGAATTTAC ACTCCTGAAT ATTTTAATAC GAATAAAATA ATTGCAATTG GGATAATCAT 420  
 GGTAAAGAT ATCGTATCTC TCAATTGCCA TTTAAGCTGT CTGTAGCTCG TTCTCTTAAC 480  
 ATTGGCATCA TAACCCCTAA CTTCCATTGC GACCGCTAAT TCTTCGGCGC GTTGGAAAGC 540  
 TGAGATGAAT AGTGGCACTA GTAATGGAAT AAATGATTTA ATACGTGTTG CAATGTTCCC 600  
 TGAACCTTATT TCAGAACCAC GCGACTTTTG CGCCAAATG ATTTTATCTA ACTCATCCAT 660  
 TAACGTCGGG ATGAATCGTA ACGCAATGGA CATTATCATA CTTAATTGAT GAACTGGTAA 720  
 TTTAAACATC tTTAGTGGTG CAAGTAATCT TTCAAACGCA TCTGTAAAT CAATTGGACT 780  
 TGTAGATaGT GTCaTAATTG TTGCAATCAT TACAATCCCA ATTAAACGCA GTGrTATATA 840  
 TAGCCCTTCT AAAATACCAT TAGTTTCAAT CGTGATGCCA TGCCATTCAA CTAATACATA 900  
 TCCACCTTTA GTTAAAAATA TATGCATCAT TAATGTGAAG ATTAAAAAGA AAAATATTGG 960  
 TGTTAAACCT TTGATTAGGA ACCATAATTG AATTTTTGCT AATCTCATAA TGAAnAnGAT 1020  
 AAGTGCAAAC ACCCAAAGAT ATG 1043

(2) INFORMATION FOR SEQ ID NO: 841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 841:

5 TCGAAATCAA ATTATAATAG ACAATTTTAG GAGGTGGACT TTCGATGACC AAAGGAATCT 60  
 TAGGAAGAAA AATTGGGATG ACACAAGTAT TCGGAGAAAA CGGTGAATTA ATCCCTGTAA 120  
 CAGTAGTAGA AGCTAAAGAA AATGTTGTAT TACAAAAGAA AACTGTAGAA GTTGATGGAT 180  
 10 ACAACGCAAT CCAAGTTGGA TTTGAAGACA AAAAAGCATA CAAAAAAGAT GCAAAATCTA 240  
 ATAAATATGC TAATAAACCA GCTGAAGGTC ACGCTAAAAA AGCTGACGCn GCACTGAGAG 300  
 nTCCCCCTCAT AATTTCCCCA AnCGTAACCA TGTGTGAATA AAT 343

## (2) INFORMATION FOR SEQ ID NO: 842:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 842:

25 ATGAGTATTT TAATGATGCG CTACGAGCGT ATGGTCTTAC TGTGAnAACA GGTGAATTTG 60  
 GAACACACAT GAATGTTAGC ATAAATAATG wtGGwCagTC TCTGGTAGTT TAGAATTAGA 120  
 30 AGAATTAAAG CAATTTAGAC AATGGGGTTC TAAACACCA GGTCATCCTG AATACAGACA 180  
 TACAGATGGT GTAGAAGTTA CTACCGGACC ACTTGGACAA GGTTTGTGCTA TGTCmGTAGG 240  
 ATTMGCTTTA GCAGrAGATC ACCTAGCAGG GAAATTTAAT AAAGAAGGAT ATAATGTTGT 300  
 35 AGATCATTAC ACATATGTAT TAGCTTCTGA CCGTGATTTA ATGGAAGGTA TATCGCATGA 360  
 AGCAGCTTCA TTTGCTGGAC ATAATAAATT AAGTAAATTA GTTGTTTTAT ACGATTCAAA 420  
 40 TGGATATTTT 430

## (2) INFORMATION FOR SEQ ID NO: 843:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 843:

50 GGACTGCCCCG ATGATTTGAC AAATGAATTG CTGATTTGAT TTATATATTA TCTGnAATTA 60

55

TCATCTATCC AACAAATATGT CTTATCAATG GTATAGTCTT TGCACACCAA TGGAGGnAAA 180  
TAAATCTCAA CCTTACTATA TTAATATATA ATCAAATCTT AGATTAACTA GTGTAATGAT 240  
5 ACAGATGGAT AATTGAGTAC AAATTTAAAA CCCTGAGATT TTCGCTTTAA TTTGAAAACC 300  
TCAGGGnTTA TTTGATTTTT ATATAATGA 329

## (2) INFORMATION FOR SEQ ID NO: 844:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 844:

20 AGATGAAGAA AGTGTTCAT CGATTATCTT AACAGTTGTT GCTTTATATA CTACanTTCT 60  
TCCTAGATCT TGTACCGTTG AAAAGAGACC TGGTTGTAAA ATCTTAATTG ACATTTTCAA 120  
TCACCACCCA GTCATCAACA TTAAAGTTGC CATCTGATAT ATCTCTTTCG ATTTGTATAA 180  
25 ATTTCTGTTC ATCTATTGCA TAAAATTGTA TCCATTCTCC TGCTTCGTAC ATTGACATTG 240  
GTTACGCTC GCTGCTAAAT ACTTTTAACG GTGTGCGTCC AATAATTGTC CATCCGCCAG 300  
GGAAATCTGA TGGGATATAG TCCTGTTTGA TTATTCGCAA TACCTACAGA ACCTGGCATG 360  
30 AATTTTTTAA CCTTGGGChG ATTACGTCTA nGGnGTATGT 400

## (2) INFORMATION FOR SEQ ID NO: 845:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 845:

45 CATAAGTCCA GTAACCTTCA ACTGTGTCCT CATCTTTAGT TCCAAATATA TCAACGTATT 60  
TATTTCTTAA CTGATTAATG TTTCCCCAAC TCTCGGATCC AAACACTTGA ATATGACTAT 120  
ACCAAACCCA CGTTTGCAAT GTTGCATGAA TGCTACCATT GGGCTTTTGC CATAACCATT 180  
50 TTCCAGATAA TGAAAAATGC GGCTGAGTGT AATATTTGAT TAGTTCATTG ATATTAGTCT 240  
CGTTTTCACT GATATTATAG GCTTTTGCTT CAGATGAAAA ACTGATTGGT GTTTTAGGAA 300  
GTTGTGTTGA TGAGTTTCT AAAAGTAACA ATGCTGTTGA TAAACTAAT TTATTCATGA 360



ACCGATTCCG AATTAAATAA AAGCTAAAAC TATGTTAAAT AAACTTAAAC AGTTAGTAGT 480  
GTTATTTAAG CAAAACCTTAT CATTTTTAAG TTGGACAGAA CAGATCAATA AGAGC 535

(2) INFORMATION FOR SEQ ID NO: 846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 846:

TCAATCGATC AAATGGTGAT TGACCTTTTA AATTGTATG ATCAAAATAA TGATTGTTGG 60  
CCATATCTTT ACTATGCTTA CGTGCAGTTT CAGAATTCTG TTTAGAATAC TTCAATGTAG 120  
ATAATTGATG TTGTTTCTT TCAGCATTAA CTAAATCAAA ATTTTGTAGT TCAAAACTAT 180  
CTGCAAGCGA TTTCGATGGT GCTCCATATT GTTCTTTTAA TCTATTTTCC ATAGCATCAC 240  
TTACTTGTA AAGAGCTGTT ACATTATTAC GTCGATGCTT ATCATAAAAT ACCGTCGTAT 300  
AAATGTGATT TTTATGGAAA ACATCATATT CTTTATTATT TTGTTGTA CGCACTCTAC 360  
CTTTAACAAT CTCTGTTTCT GGTTGCCTA ATCTTGCCT TACAACCGAT TTAGGTGTAT 420  
TGTATTTAAT TTTTGATTTT GAAGTGATTA TATTTTGATT TGTATATAAC GCATTAACCT 480  
TATCTTTCAT GTAACCTATC ATTATAAAA 509

(2) INFORMATION FOR SEQ ID NO: 847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 847:

CGTATTGATC TATAAATAGT GTTTAGATGC TATAGTCGGA TGCTTAAGTA ATTTAAAGAA 60  
AGTATCTTTA ACATCGATGT GTGTATAATC ATTTTITAGAA GTATTATAAT CTTTTCTTC 120  
TCCCTTCTAA AATATATACA GGTGCTTCAT CAGCTAGTGG TTCAACTGGA ATGTCAGCAT 180  
AACTTCGCA TCATATGTTA AACAAAAACG ATTGTATCTG TACTTCACCT ATAACAGCAC 240  
TATCCAATTC GTGCTTATCA AATAAACTAA GATTTTGTG AGTACCTTTT CACAACTAGT 300  
ACATACGTCT TGAGTTCTGA AGCATCATTT CATAAGGAGA ATACTGGCCA CGTGTGGACT 360

## (2) INFORMATION FOR SEQ ID NO: 848:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 848:

TACCACTTGA ATACATTGCA TATAAAATAC GACGTTGTAC TGGTTTTTAA CCATCACGAA 60  
 CATCTGGCAA TGCACGCTCT TGAATAATAT ATTTACTATA TCTTCCAAAG CGATCACCTA 120  
 AAACATCTTC AAGTGATAAA TCTTGAATTA TTTCACTCAC TAGATTTTCCT CCTCATCAAA 180  
 TTGATCATTT TCAAGCACTT GACTTTCAGA ATTATCTAAA ATACTTTGGT CCTCTTGCAT 240  
 ACCAAACTCA ACATGCTTTT CAATCCATTC ACGTCTAGGT TGTACTTTGT GCACCCATTG 300  
 AATGTTGTTA CACGTTTAGA TGGAACGCAC TTGCATCTTG CAACTTGTGA CACGnATTGA 360  
 AAGTTnCGTG TTTGCGGGGG TThCAGCGTC GTTTGCCCAT 400

## (2) INFORMATION FOR SEQ ID NO: 849:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 849:

TTTATATGAT TTATTTGAGG AGTTAAGAGA TTTATTTAAA GAAGAAGATT TAGAACCATG 60  
 GACATCATGC GAATTTGATT TTACAAGAGA AGGTGAATTA AAAGTTTCAT TTGATTATAT 120  
 TGATTGGATA AATTCAGAAT TTGGTCAAAT AGGTCCGACAA AATTACTATA AGTATAGAAA 180  
 ATTTGGAATT TTACCAGAAA CGGAATATGA AATTAATAAA GTTAAAGAAA TCGAGCAATA 240  
 TATTAAAGAG CTAGAAGAAT AACTATCTT AATGTAAGAC TAAACAATAA AGCTTTGTTT 300  
 AGTCTTTTTTA GCGTTTAAGT AAAAAGCaAT AGATACCGTA AAGTTGATGC TCATCAAATA 360  
 ATAATATAaA GATAATTTTA GGTTTTTTAAA CTTTTAATCG 400

## (2) INFORMATION FOR SEQ ID NO: 850:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 923 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 850:

5 CAGGCCATAC TTACAATTTT GGCCATCGTC CGGATGTATT nGGAATCGTT GGATAATAAG 60  
 CATCAAGGTC GTGACTATTT CGTAAAATTC CAACTGTCCC AGAATTTACA TCATTATGTC 120  
 CAATTACTGG GCAACCaGAT TTTGCCAACT ATCTATATtT CaTATATTCC aAATGTTAAA 180  
 10 ATGGTTGAAT CAAAATCTTT GAAATTATAC TTATTTAGTT TCAGAAATCa CGGTGATTTT 240  
 CACGAAGATT GTATGAATAT TATTATGAAT GATTTGATAG AGCTTATGGA CCCACATTAT 300  
 ATTGAAGTCT GGGGCAAGTT CACACACGTG GTGGAATTTT TATTGATCCT TATACAACT 360  
 ATGGACGTCC AAATTCTAAA TATGAAAAAA TGGCTGAGCA TCGTTTGATG AATCATGATT 420  
 TATATCCCGA AAAAATAGAT AATCGTTAAA TGTATCATTT AATAAACACA CCAATAAGTT 480  
 GATTTTCCTA ACTTATTGGT GTGTTTTTCA TTTAGCATAC ATAATAGGTT ACATTAAAAT 540  
 AACATTTTAT ACCAAAGTAC ACCAAAAGAA TATTAGTACA CGAATTAAAC AACATTTTTA 600  
 TAGAAACCTA TTGCACTTTA ACGTCAATAA GTATATTTTT ATATTATCTC TAATTAATTG 660  
 25 TGC GCGCTTA ATAACAGAAT ATTCTCAATA TTTTATTTT TTTGTGATT GTTGAATAT 720  
 TTAGTTGATA AGGCACAATC AAATTTACTT AACTATTGT ATTAGGGGAA GAAAGGATGG 780  
 GATGTATACA TGACACAACA AACTCCCAT GGAAATCAAA TTCAAGACAT ACCTCAAACA 840  
 30 GGATTTTTCG GGcATCCTCG AGGACTAGGC GTACTCTTCT TTGtAGAGTT CTGGGrAAGG 900  
 KTTAGTTATT ATGGGCATGC GTG 923

## (2) INFORMATION FOR SEQ ID NO: 851:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1004 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 851:

45 TTAnTTGCAT CTATTTTCAGT TGGTGTAAG AAAGCGGAAT TTGATTTTAT TGAAAAGTTA 60  
 GcTCAAGAAA AATTAATCCC CgAATATATT ACAATAGATA TTGCGCATGG TcACTcAGAT 120  
 TCaGTGATAA ACATGATTAA ACATATAAAA ACCCATATAC CTGATAGTTT TGTTATTGCT 180  
 50 GGTAATGTTG GTACGCCAGA AGGTGTTAGA GAATTAGAAA ATGCTGGTGC TGATGCTACC 240  
 AAAGTCGGTA TAGGTCCTGG TAGAGTTTGT ATTACAAAGA TTAAACAGG TTTTGGTACT 300

GCCGATGGTG GTATAAGAAC GCATGGCGAC ATTGCTAAAT CAATTAGATT TGGTGCATCA 420  
 ATGGTCATGA TTGGTTCATt WTTTGGCGCA CACGAAGAAT CACCTGGTGA AACTGTAGAA 480  
 5 CTTGATGGTA AACAGTATAA AGAATATTTT GGTAGTGCAT CTGAATTTCA AAAAGGCGAA 540  
 CATAAAATG TAGAAGGTAA AAAAATGTTT GTAGAACATA AGGGTTCATT AATGGATACC 600  
 TTAAGAGAAA TGCAACAAGA TTTACAAAGC TCAATTTTCAT ATGCCGGTGG AAAAGACTTG 660  
 10 AAATCATTAC GTACTGTAGA TTATGTTATT GTTAGAAACT CTATTTTCAA CGGTGATAGA 720  
 GATTAATATT TATAGTAGGT GAKGTAAATT AAAAATTCA TAGTAAGTGT TGTTCGCTTT 780  
 TTATCAATTA TTATCATTGC GCCAnTAACA GAATTTAAAC CATTCAATTC TTTACAAAAT 840  
 GAAGTAAGAC AATATATTGA CATTACATC AATAAGAAA CAATTTCTGC GGAAAATAAA 900  
 TTGGATACAC CGAAGAAACA ACAATTTGCC TTTAATAATA TACAAATGAA CATGTCGAAA 960  
 20 TCAGATGTTG AGAAAACATT AAATAAACCA AAAAGAGTGA CATn 1004

## (2) INFORMATION FOR SEQ ID NO: 852:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 852:

GTTCGCTCCA ATGTACGCAG TTGTATATGC ATAGACACCA AAATCGAACC ATTCCATTGC 60  
 ATTACCGATA CCGGTTGCAA CAACGGTTTT TTTAGCTTTC TTTGCATCCA CCATGTTAAT 120  
 35 ATTCTCTTTA TTAAGATCCA TGAATTCATA CACTCCCTCT TGTATGTTTC ATAATTATAC 180  
 GGAGTTAATT AGTTTTGTCA AATTTATAAG AATTTAAACT TTTATATAAA TACCAAAGTA 240  
 40 TGTGTTGTCA AAAATTTTCGC TTTATCGnAT TAAATTCATG GTTTTATACC TCATACATTG 300  
 ATTAGACATA ATAATCTAAA CACGACGTTA CTTTGGATAT ACTnAATGGT nnCACACTCA 360  
 GTAGGAAGCA CGCATTGCT CGATAATGTA ACCATACTCA 400

## (2) INFORMATION FOR SEQ ID NO: 853:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GGTGAAATTG TAACTATATA ATCGATATTA CCTTCAGTGT TCAAACTGG AAAATAATAA 60  
 TTACCATCAC TCTTTTGTG GAATTTATAA ATTTTAAAAG GTTCACCAAG TGTATACGAG 120  
 5 GCTTTCTCTT TATTATAGAT TTTATCAAGT GAAGTAACAT AAGAAAGATA GTCTTTTTCG 180  
 GCTAAATTAC GTACGTCAGT AGGAACACTC TTGTCCTCGA CATTAACTTG CACATGCTTC 240  
 TTATCTTTTG CTTTGATATT TGAATTGCTC TCAGCGTTTG CAATAGGGGT AACACTTAAA 300  
 10 GAAATATTA AACTTAAAGC TATTAATTTT GGAAAGTTTC TTTTCATATA AAAACTCCTT 360  
 T 361

(2) INFORMATION FOR SEQ ID NO: 854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 605 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 854:

25 ACnTTATACT AGAnAAAAGnT ATTAAAGTAT ATCTGCTTTA CACCATTAAA AAGCGGCAAA 60  
 TGCTATAGAT AATCTAAAGC ATCTGCCGTA TGAGnATTTA TTTATTTTTG ATTGTCATAA 120  
 TCGTGTGGTT TTAAATTAAT TGTTTCTAGC TTTACAAATT TTGTTTTGTG AATGATTTTA 180  
 30 TGAATAAAGT AAATCAACGC TAGAATGATT AAAGGTAAAA AGTTTTTAAA AGCATTTAAC 240  
 CATTGATCTT TAAAAATATA TTCAACTGAG CCACCAAATA GCAAGAATAA TAGTGTAGTG 300  
 ATGACAATGA TTGGTCCTAA TGGATAAAAA GGTGCTTTAT ATGGTAGGAC CTTATTAGGG 360  
 35 TCTTGACCTT GTTTTTTAAT AGCTTGTCGC AATCGTATTT GTGACCAAAT GCTTGATCCC 420  
 CAAACAATA TAATCATTGA ACCAATAATT TCAAGTAAAT TAAAAACGGC ATTTGAATTA 480  
 40 AAGTTTGCAT AAATAATAAC AATAACAACG ACTGCATAAG TAGTTAATAA TGCTCTTAAA 540  
 GGTAACCTAG TTGTCTTGTT TAATTTACTT AAAAATTGGG GTGCTTTTTT GTCTGAACTT 600  
 AAGGA 605

(2) INFORMATION FOR SEQ ID NO: 855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TTGAACAAGC ATTTTAAAT AGTCAACAAC ATCAmGCAAT TAGTGAAGAG GCACAAC TTT 60  
TAAATAATCC AGATGAATTA ATGGCATTTT TAAAGAATAA GCGTAAAAAT ATTTTAGAAA 120  
5 ATGCATACAT TATGCCGCAT AATATGAGAG AAATGTTACG AAGTTATTTG GAAAGTATGT 180  
CTCAAGACTT TAATGTTGGC GGATTTT TTA ATAAAAAGAA GAAAAA ACTA CAAATTCAAC 240  
AACAGCGATT ATTAACAGCG ACAGATGCGT TACAAGAACA TGTTAATCAA CAAATTCGTC 300  
10 AACCAATGCG AGAAGATATG TCATTTGTTA CGCGTTTTAT CAATAAAAAA GmAGCTTCAG 360  
aTAmAGTATT AAATCAGCAT TATGACGTTA AGCCAGAAAT GATTGAAGGT TTATATCAAC 420  
15 CACAAACATC AATCAGCAAT ACTTATGTAC TTACATTTTC AGACGAAGTG GTTAAAGCCA 480  
TTAAGAAATA TGTTGAACAA CAATCAACAC CAATT 515

## (2) INFORMATION FOR SEQ ID NO: 856:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1607 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 856:

GTCATTTTTA AAATTCGCA TTCGCGTTTA ATTTTCTCTC TTTTCTCTT TTCTTCTAGT 60  
30 GACATACTTT CTTTAGGTGT TTCAACCAAT TCAGATGTAT CTACATCATC AATTTTAGTG 120  
ATTTTGTCTA CATCTTCTT TAAATCTTCT GGGACGTTCT CGAAACGCTT ATATTGCTCT 180  
TTAGAGATAC TAGCAGCTAT TTCATTAGCT CCTAAAATTT CATCTATCAA GCCGAAAGAC 240  
35 AAGGCTTCTT CTGCAGTAAG CCAAGTTTCT GCATCTAACA TCTGTTTTAA GTGTTCTTGA 300  
TCTAAATCTT TTGCTTTATC TAAATAAGCT GAATTACTAA CAGCATCTGT TTTTCAAGT 360  
40 AAATCCGCTG TCTTCTTAA TTCTTCTGCA TTACCTACAG TCATAACCCA TGAATTATGA 420  
ATCATTAAAA AACTATTTT GTGCATAAAA ATAGTGTCAC CACTCATAGC GATAACACTA 480  
GCAATTGATG CCGCTAAGGC ATCGACATAG ATATTAATTT TTGCAGGATG CATTTT TAGC 540  
45 ATATTGTATA TTGCATGTCC TTCAAATACA CTGCCTCCAG ATGAATTTAT ATGAACATCT 600  
ATTTCACTGA TGTCTCCTAG TTCATCTAGT TTATTTTGA AATCTGTAGC AGTTACATCA 660  
CTTTCAAACC ATTTATCACT TACAATATCA CCATAAATGa ATATTCACC TTTACTTTTT 720  
50 GATTTTCTTT TCATTTGAAA ATACTTAGCT TTCATTGACA TTTTATCAC CACCTTTCaA 780  
AGATTTTCTT AATTCAAGTG GCGTGTCAT TGGGTATAAA TCACCGCTTA ATTAGCGGCT 840

AACCCTACG AACTGCTTTA AAGTACACTT CTGCTTGTGT TGCCTATCA GCCCTTAAAT 960  
 AAGATTTAAC GTTAAATTTA AAATACCTAT TTTTCTCTCT GTCTGTTTTA GTAAGTAGTT 1020  
 5 TCCGATTAA<sub>n</sub> TTCTTCTTCA TACTGTTTGA CGATTGGCAA TAAGGTATGC TGCAAGTAAA 1080  
 ATCTGTTTAA CTCTTCATTT TTCGCGAAAT TTGTATTTGA TCTTGCATTT AAGAATATTG 1140  
 AGGGCAATTG AAAAACGTTA GCTACTCTTT CTCTTGTTAA ATTCTCGCTT GCCCTATAT 1200  
 10 CTTCAGAGAC ATATTTTTTA GGTAAAGGTT CGATTTC AAC ACCAGGCTCT TGAATAATA 1260  
 TTCCACCGTT TTCTTCATAG TACTGTTTGA AATCTTCTAA CACTTGTTGC CTTTTTCTG 1320  
 15 TACTTACATT GGAACCATAT TTAAGCATAA AAGAATCTGG TTTTGCATT TCTGTAAGAT 1380  
 TAAAGGTTCT TACTGCATTG TCAAAATCAG TTGTATTCTT CAACACATCA ATCGGACTAA 1440  
 TACCTTGAAC CATATTAGAT GCCACGATGT GTTTAAAATG CAACATGTCC aTATTATGAA 1500  
 20 CAATCAATTT ATTTCCAGTT GCAGCATGAA TGAATAATA AAGTTCAC<sub>c</sub>G TGATTGGTTT 1560  
 TCAATTAACA TTTCAACAAC ATCTGGATTT AATAAGAAAA GCTTTGA 1607

(2) INFORMATION FOR SEQ ID NO: 857:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 857:

35 ATGCGCATTT AACCGCATTT AGAGATGCTG AAGATCAGTA TAAAGCTTTG TTAGAAATTA 60  
 CAACATTACC AGAAGGTAGA ATTTATGTTG CTCGCCAAGA TCAACTCATT GTGGGTTATG 120  
 TCACTTTCCA CTATCCTGAT GAAATTGAGC GCTGGTCTAC AGGTAAGCTT CCATATTTAA 180  
 40 TCGAATTGGG GGCAATTGAA GTCAGCATCA ATTTTAGGCA ATTACAACTT GCAGAAAAGC 240  
 TGATACAACT TAGCCTTCTA CACCAGAATT CGAGAATTAT ATCGGnATAA CTACAGGATA 300  
 TTACCGGCAT TGGGGGTTTA AAAAATTCCC AGTnAGAGGT ATTnCC 346

(2) INFORMATION FOR SEQ ID NO: 858:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

	ATTACTATAA TGAATCTTGC GAGATATTTA GAAGTAATGA TACAAnATAA TGGACTTTAG	60
	AATTTmAATT TACAATAAAT AGTTCTATGA TTAAATGTCA GTTTTATGAC ATTTATTTAT	120
5	TGAAAATACG AACGAATGaG CGATaTGATA ATATAGATAA GAATGATTTT AATTTAGGAG	180
	GCCTTTATGG TGCATAATAA AAACAATACA ATTTTAAAAA TGATCAAAGG TGAAGAAACA	240
10	TCACATACAC CTGTTTGGTT TATGCGACAA GCTGGCCGTT CGCAACCAGA ATATCGAAAA	300
	TTGAAAGAAA AATATTCACT ATTCGATATT ACACATCAGC CGGAGTTGTG CGCTTATGTA	360
	ACACATTTAC CAGTTGATAA TTATCATACA GATGCAGCAA TTTTATACAA AGATATTATG	420
15	ACACCATTAA AGCCAATTGG TGTCGATGTA GAAATTAAAT CGGGTATTGG TCCAGTGATT	480
	CATAATCCAA TCAAAACAAT TCAAGATGTT GAGAACTTT CTCAAATAGA CCCCGAACGA	540
	GATGTACCAT ATGTATTAGA TACAATTAAA CTTTTAACAG AAGAAAAGTT AAATGTGCCG	600
20	CTAATAGGAT TTAAGGGGC ACCATTTACA TTAGCGTCAT ATATGATTGA aGGCGGACCA	660
	TCGAAAAATT ACAATTTTAC AAAAGCGATG ATGTATAGAG ATGAAGCAAC ATGGTTTGCT	720
25	TTAATGAATC ATTTAGTTGA TGTATCTGTT AAATATGTAA CAGCTCAAGT CGAAGCAGGT	780
	GCCGAATTGA TTCAAATTTT CGATTCATGG GTAGGTGCAT TAAATGTCTGA GGATTACAGA	840
	CGTTACATTA AACCACATAT GATTCGATTA ATCAGTGAGG TTAAAGAAAA ACATGATGTG	900
30	CCGGTAATTT TATTCGGTGT AGGTGCCAGT CATTTAATCA ATGAATGGAA TGATTTACCG	960
	ATTGATGTAT TAGGCCTAGA TTGGAGAACG TCTATTAATC AGGCTCAACA ATTAGGCGTT	1020
	ACTAAAACAT TACAAGGGAA TTTAGATCCA TCAATTTTAT TAGCACCATG GAATGTCATT	1080
35	GAAGAGAGAT TGAAACCAAT ATTAGATcAA GGTATGGAGA ACGGTAAACA CATCTTTAAT	1140
	TTAGGACACG GTGTATTCCC AGAAGTGCAC CAGAGA	1176

## (2) INFORMATION FOR SEQ ID NO: 859:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 621 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 859:

50	ATTTGGTGCA TTGGTAnAAT TGACCTGAAA GnAAAAAGTG GTTTAGTTGC ACATTGAGTG	60
	nAAGTGCGCA GATGAATTAT GTTGAAAACG TGAGGAAGAG CACCTTTGCT GTTGGTGATG	120
55	AAGTAGACGT AAAAGTATTA TCTATTGCTG ATGATGGAAA AATTAGTCTT TcAATTAAGA	180



AAAAAGCCGA AGATTTTGAA AAGAAATTAA GCAATTTCTT AAAAGATAGT GAAGATAAAT 300  
 TAACTTCAAT CAAACGTCAA ACAGAATCTA GACGCGGTGG CAAAGGTTCA AGACGTTAAT 360  
 5 TAAAATAAAT AAAGACTGTT TCGATAAGGA ATATATTTAG AATGATGCGT ATCGAATAAT 420  
 CGATTGCAGC GTTAGACAAT CTAAGACTGT TTCTTAAATA AGGAGCAGTC TCTTTTATTT 480  
 GTAATGATAT AACTAAGACT TATACCATTT TTGAAAATTG TAAAAGTGAG GTGATGTTAT 540  
 10 GCAGTTAAAT AGTAATGGTT GGCATGTTGA TGACCATATT GTTGTCGCTG TTTCTACAGG 600  
 TATTGATAGT ATGTGTTTnn T 621

(2) INFORMATION FOR SEQ ID NO: 860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 860:

25 TATATTAGGT ACTTGTGTTG GTATTGTGCC AGCTTTGCTG TCTACTATAA TTTCTAAAAG 60  
 GTTTGAACAT ATAAAAGGGA AAGTGCTAGG TGTATTTAAT TTTGTGAGAT ATATTGGAAT 120  
 30 GACTGTCGGT GCATTATTAA TTGGTATCAT TTCTCAGCCG TTGGTAGCCT TTTACTTCAC 180  
 AACTATAACT ATCATGTAA TAGTAATATT TCTTTATATA AAGATAGTTG ACTTTCAGCT 240  
 AAAGTATGCC AAATAAAGTT AAAAAAGCAG TGAATCATTT CAATAGATGG AATGATTCAC 300  
 35 TGCTTTTGT TTATAGAAAT TTAATAATCA TGCCTTTATG CTAACAACAA TATTATTTTA 360  
 CTCTCTTACG TTTGCCAATG TAACCGTATA GCAAAGTAAA TGAATGCGAT AATGATGACA 420  
 ACATACATat ACGTGAATAG GAAGGAAGAC CAGTCATCAA CATACCAAAG CTATCGCTCA 480  
 40 AAGTGCGnCT GGTAATTAA ACCGAATTCC AnGATTGTAG GAACCCnATT AATGGAAATA 540  
 ACGG 544

(2) INFORMATION FOR SEQ ID NO: 861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 861:

AATTTAAAAT ACATTTATGC TTTACCCATT CGAAAATACC TTAATCATT TCATTTATAG 120  
 CATTGTTTGA TTGAAGGATA AAAAGTTGTT GTTTACAATA AAAATAATGA GTATCTGAAA 180  
 5 TGAGGGATT C AnTATGACAC ATGTGGAAGT AGTAGCGACT ATCGCGCCAC AATTATCTAT 240  
 CGAAGAACT TTAATTCAnA AnATTAAATCA TCGTATTGAT GCAATAGACG TATTAGAATT 300  
 ACGAATTGAT CAAATTGAAA ATGTCACAGT TGaTCAAGTG GCAGAAmTGA TTACAAAGCT 360  
 10 GaAGGTTATG CAAGATTCAT TCAAATTATT AGTTACGTAT CGTACAAAGT TACAAGGTGG 420  
 CTATGGGCAA TTTACAAATG ACTCGTATCT TAATTTAATA TCAGACTTAG CAAATATCAA 480  
 15 TGGCATAGAT ATGATTGATA TAGAATGGCA AGCAGATATT GACATTGAAA AACATCAACG 540  
 AATCATTACA CATTTGCAAC AGTATAATAA AGAGGTGGTT ATATCACATC ATAATtTCGA 600  
 AAGTACGCCT CCATTAGATG AATTGCaATT TATATTTTTTh nAAATGCAAA A 651

(2) INFORMATION FOR SEQ ID NO: 862:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 401 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 862:

TGTGAGTGGT AATGACACAC AAGCAGATTT AATAGGTTAT AGTTTTAAGT TTGACGGTGC 60  
 GATTTCAAGG CAAGAGGCTT CTAAAGATGT ACATGCAGTT ATATTATCGA ATAAAACACT 120  
 35 ATATTTATTA GATGTATTAC AAAAATTACC GATAGATAAA ATGAATTCAT TGAATATCCA 180  
 TCAAGAAATT ATTGATGAAA TGTCAGATAT CATTTTAATG TTATATCGTG AATATGCAGG 240  
 TATGTTTTTTT AAAAGTCAGA AACTAATCAA CCAATTAAAA AGATTGGAmC AATAACaTAA 300  
 40 AATAATAAAa GGTATTCAAG TAGCCACATA GATGTGTTTA TTTGAATACC TTTTkGAATA 360  
 GaaAAGaGAT ACTGGCaATT TTACTAACCA GtATCTCTTT T 401

(2) INFORMATION FOR SEQ ID NO: 863:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 863:

ACAAAGTAAT CAATATGTAA TATAAAATAC ACTGGTACTC AATATATAAT GATGATAAAA 120  
 TTAATTTTAA TTAGATAGAG TTGCTTTGTG TTTTAAACGC nGATGCTACT ACTTATCTTA 180  
 5 ACAGTTGATT AAGTAAATCA TTAAACAGCG AGATTATnCA ACCAGGGGGA TGACTTAATG 240  
 AATTTATTCA GACACCAAAA TTTAGTATCA GAAATTTAAT GTCGGTATTT TTTCAGCTTT 300  
 AATGCCAC 308

10 (2) INFORMATION FOR SEQ ID NO: 864:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 1827 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 864:

TTCTACATCT TAAACGATGA CCTAACTATG ACGTTAATCT GGAAAGATGG GGAGTTGCTA 60  
 GTATGATGTT GAAATTTAAA GCTTGGGATA AAGATAAAAA AGTTATGAGT ATTATTGACG 120  
 25 AAATCGATTT TAATAGTGGG TACATTTTGA TTTCAACAGG TTATAAAAGT TTCAATGAAG 180  
 TAAAACTATT ACAATACACA GGATTTAAAG ATGTGCACGG TGTGGAGATT TATGAAGGGG 240  
 ATATTGTTCA AGATTGTTAT TCGAGAGAAG TAAGTTTAT CGAGTTTAAA GAAGGAGCCT 300  
 30 TTTATATAAC TTTTAGCAAT GTAAGTGAAT TACTAAGTGA AAATGACGAT ATTATTGAAA 360  
 TTGTTGAAA TATTTTGA AATGAGATGC TATTGGAGGT TATGAGATGA CGTTCACCTT 420  
 35 ATCAGATGAA CAATATAAAA ATCTTTGTAC TAACTCTAAC AAGTTATTAG ATAACTTCA 480  
 CAAAGCATTAA AAGATCGTG AAGAGTACAA GAAGCAACGA GATGAGCTTA TTGGGGATAT 540  
 AGCGAAGTTA CGAGATTGTA ACAAAGAACT GGAGAAGAAA GCAAGCGCAT GGGATAGGTA 600  
 40 TTGCAAGAGC GTTGAAAAAG ATTTAATAAAA CGAATTCGGT AACGATGATG AAAGAGTTAA 660  
 ATTCGGAATG GAATTAAACA ATAAAATTTT TATGGAGGAT GACACAAATG AATAATCGCG 720  
 AAAAAATCGA ACAGTCCGTT ATTAGTGCTA GTGCGTATAA CGGTAATGAC ACAGAGGGGT 780  
 45 TGCTAAAAGA GATTGAGGAC GTGTATAAGA AAGCGCAAgC GTTTGATGAA ATACTTGAGG 840  
 GAATGACAAA TGCTATTCAA CATTGAGTTA AAGAAGGTAT TGAAGTTGAT GAAGCAGTAG 900  
 GGATTATGGC AGGTCAAGTT GTCTATAAAT ATGAGGAGGA ATAGGAAAAT GACTAACACA 960  
 50 TTACAAGTAA AACTATTATC aAAAAATGCT AGAATGCCCG AACGAAATCA TAAGACGGAT 1020  
 GCAGGTTATG ACATATTCTC AGCTGAAACT GTCGTACTCG AACCACAAGA AAAAGCAGTG 1080

AGTGGTGTAA GTAGTAAAAC GTATTTAGTG ATTGAAACAG GCAAGATAGA CGCGGGATAT 1200  
 5 CATGGCAATT TAGGGATTAA TATCAAGAAT GATGAAGAAC GTGATGGAAT ACCCTTTTTTA 1260  
 TATGATGATA TAGACGCTGA ATTAGAAGAT GGATTAATAA GCATTTTAGA TATAAAAGGT 1320  
 AACTATGTAC AAGATGGAAG AGGCATAAGA AGAGTTTACC AAATCAACAA AGGCGATAAA 1380  
 10 CTAGCTCAAT TGGTTATCGT GCCTATATGG ACACCGGAAC TAAAGCAAGT GGAGGAATTC 1440  
 GAAAGTGTTT CAGAACGTGG AGCAAAAGGC TTCGGAAGTA GCGGAGTGTA AAGACATCTT 1500  
 AGATCGAGTT AAGGAGGTTT TGGGGAAGTG ACGCAATACT TAGTCACAAC ATTCAAAGAT 1560  
 15 TCAACAGGAC GACCACATGA ACATATTACT GTGGCTAGAG ATAATCAGAC GTTTACAGTT 1620  
 ATTGAGGCAG AGAGTAAAGA AGAAGCTGAG CGCAAATACG AGGCACAAGT TAAGATAAGG 1680  
 AGAGATGGAG ATGCCAAAGA AAACGGTAAC GATTGATGTA GATGAAAAC TATTAGTAGT 1740  
 20 AGCTAGTAAT GAAATATCAG AACTATTATA TGAaTATGAC AGTGAGTtAA TGTCAGCTGG 1800  
 ATGGAAGATG GCGATAATAG GGATATC 1827

(2) INFORMATION FOR SEQ ID NO: 865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865:

35 TCAATTGCAT CATCATATGA AATTCTaGGG AATGGTGTGCG CAACTTTTTTC AAGTTTTGAT 60  
 GTATCACGCT CTAAAATTTT CAACTCTAGT TTACAATTTT CTAAAACCTGA TTTTACAACA 120  
 TGTGTTACAT ATTGTTCTTG AATTTCTAAA CTTTCAGCAT GATTTGTGAA AGCCATTCTT 180  
 40 CCTTCAATCA TCCAGAACTC GATCAAGTGT CTACGTGTTT yTGATTTTTTC AGCTCTGAAA 240  
 GTTGGACCAA ATGAAAATAC TTTTCCGTGT GCCATTGCTG CAGCTTCTAA GTATAACTGA 300  
 CCACTTTGAG ATAAAAACGC ATCTTGATCA AAGTATTTAG TATGGAATAA TTCATTGTGA 360  
 45 CCTTCTGGCG CACTTGCTGT CAAAATTGGT GGATCAACCT TTGTAAATCC ATCTTTGTTG 420  
 AAAAATTCAT ACGTTGCACG AATAACTTCA TTTCTAATTT TCATTACAGC ATGTTGTTTT 480  
 50 TTAGAACGTA ACCATAAATG ACGGTGATCC ATTAAGAATT CTGTACCATG ATTTTtagGT 540  
 GTAATCGGAT AGTCATGCGC TTCTGAAATA ACTTCAATTG ATTTCACTTG CATTTcGTAT 600  
 CCTAAGTCAG AACGATTATC TTCTGTAATT GTGCCTGTAA CGTATAGAGA TGATTCTTGA 660

TGCATAAAGC CTGTTCCATC ACGTAATTGT AAAAAGGCGA TTTTACCACT TGAACGTTTA 780  
 TTTGTTAACC AAGCACCAAT TGTAACGTCT TGGTTTAAAT GATCTTTCGC TTGTTTAATC 840  
 5 GTTGTTTTCA TAACCATTCT CCTATTTATT TTTTCGKTAT ACAATACTCA TTCATTTTAA 900  
 CAAAATCCGC TTTCAAGTTC TAGAACTAGA CTAAAAGATA ACGtGTAAAT GGTAATGATT 960  
 TACGCACAGA TTTGAACATT AATTTATATT AAGACAATAC AATCATCAGT TTCAGACAAA 1020  
 10 ATATATAATA AAGCCTCAAT ATTATTAGTA TGAAGGTCGT TTTTGTnCT AACATTCAAG 1080  
 TTTAATTATA AAACCTCAAAT TTTGACGACC AAACAAAAAT TCTTGTAACA GAACATAGCA 1140  
 CATGTCATGT CACAAGAATT TTACTIONTGT TTTCACTTTT TCTTTTTTTG AATTTGTCTT 1200  
 15 AATAATTTTC CAAACTGTTG AATGTCGCCT TTTTCTGAC GATAATTTTC AAGTGTTTGT 1260  
 TCAAAAAAGT TTTTATAATT ACTGTTTATG AGTCGATCAT CAAATGAAAC TATTATGCCG 1320  
 20 CGATCATTTT CATTTCTAAT TAATCTTCCA AGTCCTTnGT CTAnAACGTG TAACTGCAT 1379

## (2) INFORMATION FOR SEQ ID NO: 866:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866:

TTACAACGAA TAGTTCACCG TTCGAGTCTA ATCTATGTAA TGCTTGCTCG AATATACGAT 60  
 35 GCACGGTTTC TTTCCCTGCT CTTATTGGTG GATTGGTTAA AATAAAATCA AAACTTTGT 120  
 CTTCCACAGC AGACAAAGCA TCACTTTCCT TTACGATCAC ATTATCAATA CCATTTAATT 180  
 TTTTGTTTTT TTCAACTAAG GCTAGCGCTC TGTGATTAAC ATCTAGCATT GTAATTGAAT 240  
 40 GATGTGGTGA TACTTTAGCA ATCATCAAAC CAATTGGTCC GTAACCACAA CCAACATCGG 300  
 CAATTCGCTT ACTTGGACCA GGTGGATGCG CTTTAAAAA AGTTTGAACA AGAACATCTG 360  
 aACCATAATC TACTTTATct TTCGAAAACA CTCCTATCA GTTATTAAAT CAATTTTATG 420  
 45 AnGGTTnTAA TTGGATATTG AGTACGTTGT 450

## (2) INFORMATION FOR SEQ ID NO: 867:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867:

5 AATGTTAACA ATATAGCACC AATTAACCCC GACATGATAA TAACGTGTAA TGTTTTATTT 60  
 CCTATTAATT GTCTCGCAAT ATGAGGTGCA ATTAATCCTA AAAAGCTAAT ACCACCGACA 120  
 ACTGAAATTG CGGATCCTGC TAATATTACT GCTAAAATTA ACAATAGCAT TTAAATAGTT 180  
 10 TTAACTTTTA AACCGAGTGC GGTGCAACA GCATCACCTA GATTCAATAC ATCTAATTGA 240  
 TAACTCCATA AAATGATGAT GGATCGTTAT TAAAACCAGG GAATATAGAT AATATCCGCA 300  
 TATCAGGCCA TATAGCTACC TGTCACCAAC AGGTTTnTGC TCCAnGGTTC TnTAATAAGA 360  
 15 CGCACACGCG ACAATGCGCT TGCTACCATT AGGCAGCTTG 400

## (2) INFORMATION FOR SEQ ID NO: 868:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 1132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868:

AATCCnTnAA GTGCCATAAC ATCATCTCCT AACATCTTTA TTATACATCA ACATTTTATA 60  
 30 AAAATAACnT CTTATGATAA AAATGAAAT ACTAATTTTA ATGAGAGCGT CTTAAGCCGC 120  
 AATTGATAAA ACATATGCTA CAATATTTTT AAACACTATA CAGGAGGTAC TCTATGACAA 180  
 AATATACATT TAAACCTAAA GATTTCAAAG CGTTCAACGT AGAAGGCTTA GACGCACGAA 240  
 35 TGGAAGCTTT AAACGAATAC ATACGaCCAC AACTCCGTGA ATTAGGAGAA TATTTTAGTG 300  
 ACTTCTTTAC AAGTCAAAC TTTATCCTCA CGTAGCAAAG CATGCTAGAA 360  
 GAAGTGTGAA TCCTCCTAAA GATACATGGG TTGCTTTTGC AACAAACAAA AGAGGCTATA 420  
 40 AAATGTTACC TCATTTCCTA ATTGGTATGT TTGAAGATCA ACTGTTTGTT ATGTTTGAA 480  
 TCATGCATGA AGCAAAAGAT AAAGCAACaC GTGCAAAAGT TTTTGAAAGA AAATTTAAAG 540  
 CTATTCAACA ATTACCTGAT GATTATCGTG TTTGCTTAGA TCATATGAAA CCTGATAAAC 600  
 CATTATTATA AGATTTAACG GATGATGATT TAATAGAAGC GATACAAAGA GCCATCAATG 660  
 TGAAAAAAGG TGAATTCCTT ATAGCGCGTG CAATCACACC ACAAGATAAA AGATTAAAAA 720  
 50 GTGACAAAGC ATTTATTGCA TTTTATAAG AAACCTTCGA TCAGTTCTTA CCATTTTATT 780  
 CTGCATAAAT AACTTTGTTT AAATAATAGA GCACTTAATC ACATCCaTGA TTTCGTGctC 840  
 TTtTTTCTTA ATATTAAATC GAACGTtCAA CATAaTAATT CATACTTTTA AAAAAATTAA 900

GGTGAGTCAA AATGAATAAT AAACGACATT CAACAAATGA ACAATTAAGT TTAGACGAAA 1020  
TAAACAATAC AATTAAATTC GATCATCGCA GTTCAAATAA ACAGAAATTT TTATCATTTTC 1080  
5 TTGGACCTGG GTTATTAGTC GCTGTTGGTT ACATGGATCC CGGAAACTGG AT 1132

## (2) INFORMATION FOR SEQ ID NO: 869:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869:

CTCAATGTAT TGACTGTGAT TTGGAGTGTA TAATGCTACT GTTTTGTCTA TAGCCATCGC 60  
20 ATCAAAATATT ATATTTGAGT AATCAGTGAT AACGACATCA GACATTAGAA TTAAGTCTTG 120  
AGCACTAAGA TACTTTGGTG CAACAAGCGC CTCTTCTGGT AAGATCGCTT CATCAACACC 180  
CTGAACCACA ACATGATAGG CTTTGAATAA AGCATCTGAT AGTGGTAATT GTTGCGCACT 240  
25 CACTAATCCA ATAGGTGCGT ATAATAAAAC TGGTTTTTGA TCATTTATTT TAAACGATTT 300  
CTTATACTGT TGTGAGTAG TACTTTCGTT ACTCTTTTGT AGTAAATATT GGTGTTTAGG 360  
ATTACCATAA GCCAATACAT TGCTTGGTGA CTAGGAAAAG nCGTTTGATA AAAGGGCT 418

## (2) INFORMATION FOR SEQ ID NO: 870:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870:

GAGTnTGTTA CAGTAATTGA TTTTATTGGT AATTnTAAGA CAAATTATTT AATTCCGATT 60  
GCGCTTTCTG GGGATCAATC GCAAnATAAA GATAATTATA AGAAGTTTTT AACGAATAAC 120  
45 GATTCGATTA ATGGAGTATC TACAATTAAT TTTGAAGAAG TTGCTAAAAA ACAGATTTAC 180  
AATTCATTGG ATGCAGTATC ATTAAATCAA AATAAATTAA TATTAAAAGC TTATGAAGAA 240  
50 GTTGAAAATA GATTGGGACA CATGCCGTTA CTAATGGATT TCATACAACA ACATTCTATA 300  
GATCCAAGCG TTATATTTTC TAAATTTAGT AATTATTACG AGTTCTTAGT GAGATATAAA 360  
AAAATAGATA CATTATTGAC GGAAATGAA TCTAAAAATC TGGTTTTCTT TTCAAGGCAA 420

TTAACATATG ATGAATTAAA AAATAAAATG TTGAACGAAG TTAAGGATAT AACAGAAGAT 540  
 GATATAGATA CTTCAATTAAG AATTTTAGAT TTTTCATTTT ACAACGC 587

(2) INFORMATION FOR SEQ ID NO: 871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871:

CTACTAAACC AGGTAATCGG TAGAATCCAA GCAGGAATAA ATAAATTAAT GCnACACCAA 60  
 TAAACGATGC AAACACAGTn TTATCTAATG CATCTTGACC AAATTGGGCA CCTACTGAGT 120  
 TTGAATAAAT TTCTTTCAAG TCAACTGGTA AAGAACCTGC ATTTAACAAT kCGGCGATTT 180  
 GTTTTGCTTT TTAAACGCCT TCTTGTCCTT TAAATCCACC CGAGATTTCT ACGCTATCAG 240  
 AATTGATTGG TTGATCAACA CTTGCTGCAG AAATAAATTT AGGGTTTTTC TTTTGCTT 300  
 CTTTTTTATA GCTGTCACCT TTTTGAAT CTAACCAAAC AACCATGACA TTATCACGTT 360  
 TCTTAGAGAT TTCTCCGTT ACTTTTTTAA ATTTGTTTTT GTCTTTTACT TTAAAAGTAA 420  
 CTGTAGGcTG GTTTGTTTCC tGcTTAAATT CTTGcTTGGC AGATCCCTGT TTaATATCAG 480  
 AACCGCTTAA TTTtACTTTA TCTTCTGCAT CGCGAATTGT TAAATTAGCT TGAGAAGATA 540  
 AAATTTTACG TGCTTCATTC TGGTCTGTTA CACCAGCAAG TTGTACTCTA ATTCTATTAG 600  
 GTTCTTCAAC TTGAATTTTA GGTTCCGAAA CACCTAAAAC GTTAACACGA TTTTCTAATG 660  
 TTTGCGCTGT TGATTGTAAG GCTTTTTTAT CTATTTTGTC GCCTTTATTT AAAGGATCGA 720  
 CTTGATAAAG CACCTCAAAT CCACCTTGCA AATCAAGTCC TAAATTGmCA TTCTTTATAA 780  
 CACTTTTATA AGTTGcAGCC ATTCCGGCAA ACAACAATAC GACTAAAAGC AAGAACGCAA 840  
 TTATTCTACT ACTTTTCTTC ACATGAACAC CTCATTATTT ACGTATGTAT TTAGAATACT 900  
 TGAATACTAT TTTATAACGC AAGTGAAATC TTTCTTACAA AATTTATTAG CCTTATACAT 960  
 ATTAACATAC T 971

(2) INFORMATION FOR SEQ ID NO: 872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 636 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872:

CTGGTTAACA ACATCTGGTT CGGCATCTCC TTAGCTTCCA CTAAATCTTG GATGTCTTGG 60  
 5 nnATCTTGCG CAAGTnGTGC TTTGGCTTGT TCAATTtCTy CTTTAGTCAT CGCATTGTTA 120  
 ATGCCGTTAT GACCTTGTTG AAGTATTTGA TTAATACGAT CTTTAAAGTGC TTGTTTTTCC 180  
 TTATCTGTGA GATTTGGAAT TCGATCAATT TCGTCAATTA ATGCTTGaAC TTGcTTATCA 240  
 10 ACGTCTTTAT TGGCATCAAT TTTTGCTTTT GGTATTTTCAT TGGCATGCAC TTGTTCAATC 300  
 GCGTGGTTGC CTGCTGTTTG AACTTGAGAT ACAGCCTGAT TACTTGTTGC TTTATTAATG 360  
 15 TTGTTGATGA TGCTGTTTGC CAATTCTTCT GCTTTATTTT TCGCAATAAG CTTGTCTTGA 420  
 TCCGTCGCAT TTGAAGCTTC GATTTCCTTT AGCTTATTAG CTAAAGCTTG ATTAATAGAT 480  
 TGAATTGCCT TGTCTTTAGC ATCTTGTAAGT CGTTGATCAC CATTAAAGATT ATGGATTGCA 540  
 20 TCATTGACTg CTTGGATTGC GCCATTGATA TCATTACAT tTGTGTaTCA CTATTTAGCA 600  
 ATGTATTTGC TAGACGTTgG CATCATCGAA GTTTGT 636

## (2) INFORMATION FOR SEQ ID NO: 873:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873:

CTCTGAATGC ATTCATTAAA CGCTGGGTCT CTTTATATGA AACGTATTTG TCATTTTtag 60  
 35 AACTCAATCC GTAAAAATTG TCAACTTTCT TTTTAATATT ATCGTAATCA ATGGTTACAT 120  
 TACTTAAATC AATATCTAAA TCTATATTTT CTGCATCTTC TTAAAGCCC GCTATACTGA 180  
 40 AAAAGCCTTC AATCGGCTGA TCAATCATTT CAATATATTT TAAAGCTGTG ATTGAACCTA 240  
 AACCATGTGT TACAAAATAT GTATCCTTTT TCGGTACATT AATTTGTTTC GTCATAGCTT 300  
 CAATCCACTG ATCCACTGTC TTCGCTtCAG GGGATTCAAA ATTAAATAAT GTTACGTCAT 360  
 45 ATCCTTCTAA AGTTAAGTTA TGCTCCAACC ACTGATACCA ATGATTTCTA CTATTTCCAT 420  
 GCATAGAATG TACAATAtTA CATCTGTCAT CTCATTCTCT CCTTTCAACT TACTACTTCT 480  
 TTTCTATTTT TAAAAAATG ACTGATTACC TATAATTGTA AAATAAAAAC ACCTTAATTA 540  
 50 GAAATGTTAT ATCGCAAAGT GACATTTCTA ATTAAAGTGT ATTGTCATCA TTTCAATATC 600  
 ATTCAAAAAC AGCTAAACCT TTGTCTCTGC TTCAATTTCA CAAAAATAAT TCCCGCTGA 659

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874:

```

AAAATAAAAT CCATTTTAGT ATTCGTAGAA AATGAGAGCC CCCTTTACCA CAATATGTAA      60
ATGTATATTG TGAAAAGGGG GCTTTTATTT ATGACATAGT TGTTCAACTC ATACATTCAG      120
TTGATAATGC AGTGC GTTAT GCAGCTATCC ACTTCATATG TATGGCGCAT ACTTGATATA      180
TGAATATCAT CAAGATTTTA AAAGTATCGC TAATTTTAAA GTCCTAAAAC GCAGATTAAT      240
GGTCATGATG TGTTAnTGCG TTTTGGTTTT TAGAGCCACG TAATTCCCAn GGACATATAG      300
GAGGAACCAT TCCAC                                                              315
  
```

(2) INFORMATION FOR SEQ ID NO: 875:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875:

```

TACACGACCT TGTAAGTCAG CTGCTTTATA AGCTAGGGCG ATGTTATCAA AGTTGGATGT      60
ACTTTGAGCT TGGCATTTCG TTAATACTTT TAACGAAGGA TTTAATATAT GTCTGATACG      120
TATATATTGA TTATATTCAA TTCTTaATTt GGATAAGATT GCTGATAATT TGAAGCAATC      180
GGAGCTAAAT GGATCGAAAA ATGAATAAAT TTCGATTTTA CTTACAGGTG ATAGaTTGAT      240
ATCTTCACGA CTCTTATTTT CCATTaWTCG TAATTCTCCA GCCATGTTTA TTCACCTACA      300
ATTAATTTTA GGAATTCACC ATATGaTTAG CAGTTAATCT TaAGCGCTCA AATAAATAAT      360
CTCCAACACC TTGTGGAAAC caGCgCGaTT AATTGCTGTC TGCATATTTT CTAGCCATGC      420
ATCTCTTTCA AATTCAGTGA TTGTAAAATC TATATGTCTT TTTCTTAGCA TAGGATGTCC      480
GT                                                                              482
  
```

(2) INFORMATION FOR SEQ ID NO: 876:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 670 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876:

5 ATGCAATTGA ATTCTTAAAA GCAGAAGGCT TTGATGATAT TGAATGGGGC GAAGATTTTG 60  
 GTGCGCCACA TGAAACAGCC ATTGCTAATC ATTATGATTT ACCGGTGTTT ATTACTAATT 120  
 10 ATCCAATAA AATTAAGCCT TTCTATATGC AACCAAATCC TGAAAATGAA GAACTGTAT 180  
 TATGTGCAGA CTTAATTGCA CCTGAAGGAT ACGGTGAAAT TATTGGTGGA TCTGAACGTG 240  
 TGGATGACTT AGAATTGTTA GAACAACGCG TTAAAGAACA TGGATTAGAC GAAGAAGCAT 300  
 15 ATAGTTACTA CTTAGACTTA CGTCGTTATG GTAGTGTGCC AACTGTGGA TTTGGTTTAG 360  
 GTTTAGAGCG TACAGTAGCA TGGATTTCTG GTGTTGAACA CGTTCGTGAA ACAGCGCCAT 420  
 TCCCAAGATT ATTAAACCGT TTATATCCAT AAGTTTTAGG GTCGTTACTT AAAATATATA 480  
 20 TTATGATAAT AAAAAGAATC GTCCAGCCTA TATTAATAGC TGGGCGATTT ATTCTTGAA 540  
 AATGAAGATT GATAACGGCT TATATTAATC ATGAACAAAC TTTTGTTTAG TAACTATATT 600  
 TGGAAAATAA ATAGTTCATC TGATTATCCA TAAAGTTCAT TGTTAAATC TAGTGTTAAA 660  
 25 AAATACTGTT 670

## (2) INFORMATION FOR SEQ ID NO: 877:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 1258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877:

35 TGCAAAGTAA ACTGGATGGC TnTCTTGCCG CCAAGGATCT GATGGCGCAG GGGATCAAGA 60  
 40 TCTGATCAAG AGACAGATCC TAACCTCTCA TTTCCGATAA GTTTAGTATG TATTATAGGT 120  
 GATGATTnTC TTGTTTTCAA CCTTATACAC AATATTTTIG AnATTTATAT TATATTCATA 180  
 TAAGGAAGGC GATTAATTAC GATTCATCAT TATATCTCTA CGTGTTAATT TATTAACCTA 240  
 45 TACTATATTT ATCaACaCAA CAGTTTTTCC TTTCATTTTC AAACATAACA GAAAAGCCT 300  
 GAGACATACT TAGTCCCAGA CTGTTCTATA ATTAATTAAA GATATAACA GGTTAATCAT 360  
 50 TCAAAGCTAA CATCACATTT ATTCACTGTA ATTTTTCATA AAGAATAATA ATGACTGTAA 420  
 TTCTATACCT AAGTCAATTT GATGTACTTG CACATCTGAA GCGTATTAA TTCTACCAGG 480  
 AGTGAAGTTT AAAATACCTT TCACACCAGC TTGGACGAGT TCATCTGCAA CTTTCTGTGC 540

TAATTCATCG TTATCTTTAA CAATAACGTT CCCTATTTTC TGGCCAATAA CATCTTCTTT 660  
 TACGTCAAAC GCTTCTGTAA TCGTCATATC GTCATGTATT GAAAAGTTAT ATGTGAGCAA 720  
 5 AGCTTTCCCT AGGTTCCCAA CTCCGACAAT TGCGATTTTG ATCATGTAC TCTCGCTTAG 780  
 TTCAGATTTA AAGAAATCCA ATAAACTATC TATATTATAT CCGTaCCCTT TTTtACCTAA 840  
 TTCGCCAAA TATGAAAAGT CACGACGAAT TGTtGCCGAG TCAATTTGTa ACGCATCGCT 900  
 10 AATCGCTTTT GAATTTACAC GATCTATACC TTTAGATTTT AATGAACTGA CAAATCTATA 960  
 ATATAACGGC AAACGTTTTA AAGTTGCTCG AGGAATTTTA ACTTGGTCAC TCATTCGCTA 1020  
 15 TTTCTCCTT CGTGTtTGAA TGAATTATAT CTATGTATTC AAACGAGTTA GAGCGTAATT 1080  
 GTTAGATTAT TAAAArACAA ATAATTGaTT ACAATGAATA CCTAAATATT ATACATTAWT 1140  
 GAATTTTAAA AATAAATATC TTAGTTTCAA GACGGCGTTT TATACTGTAA AATGGTTATT 1200  
 20 AATGTAATAA TTACGCTTGT TTCATAAGTT AATAAAATTT GAGAAGACGA AGGTGAAG 1258

## (2) INFORMATION FOR SEQ ID NO: 878:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878:

AAACAATCCC CnCCAAAGTA ATTCCACCAC TAATTGTAAA TAACTTTGGA AAGGATGTTG 60  
 35 TTTGTnATTC CCATGGACAC ATGCCATCTn ATTTAAGTTT TATACTCTAT TTTTCTGATG 120  
 TCTTGATTAA TTGCAAGCGG TCTTGCGAGC CTGTGTCAAG CTCATATTCT TTATCTACTT 180  
 GCTTACCGTT TTCryTTATT AATCTTACGG TTGCGGTAAT CTTATCACCA TGTTTTTTCAG 240  
 40 CATCTATAAT TTGTGGTGAA CTAATCATCA TTAAACTTCC TTTAGATACA CGCTTCTTTA 300  
 CATCATCATA AAAAGATGAT CCTTTTTTTA TATATGATGA TACAAAATCA AAATCCGACT 360  
 GATTAAACGC AGCATTATTC GCTAAAGAAT ATCCAGCAAA GAATTCTATC AATTTGTTCT 420  
 45 TCAAGCTGTT TTCTTCTTTT TCTTTCTTTT CAACATAGTC TTCGATATCT TCACTGTCAA 480  
 AATTCAAAGT TATCTCTGTA TTGTATTTTA AATCGCTAAG CTTTAATCGT CTTCGTCTGT 540  
 50 GATGTA 546

## (2) INFORMATION FOR SEQ ID NO: 879:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 870 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879:

TTTATGAATT TTTTATGTAA CATTAAATAT TCTTCTGGCA ATCTTCCTAC TATkTCTkTT	60
ATATATCCTT CTTCTCCTTC TTAAATACT AAACCTGTGG GAGTTAGTGT GTTATACCTA	120
ATTTCTATCT CATTCAAATG ATCATTCAAA AGGTCAAAA ATTCTCTATT AAAATAACCC	180
CATTTCCCAT TTTGTAATAA ATATTTCTTT CCATCTTCCA TTTCAACTTC TGCATGTAGT	240
ATCGTTTTTA GTaGCATATT ATTTGAATGC CCCAAATTAT CkATCACKTc AATTCTGACA	300
TCATTTATAG AATTAACGTC ATATTTTAAT AAGTAATCTC CTATTTCACT GATGTAATCA	360
ACTTCAGGAT CAGTCGCATC AAATGTCTCT AATGTATTAT TTTTAAAAGA ATTTATATAT	420
ATATTGACGT CGAGCATATC ATCTAACAAG AGTATCATAT TACTTAGTTC TAAAAATCTT	480
GATATATCTA TAGATATATT TTCTGTAGTT GAAGAATTCG ATAGTTTTTT TAGCAATAAA	540
GTATCTAATA CTTCTATTTT ATTCAAGTCT TTAAAGTTA CTATTCTAGG AAATTCACTA	600
ATTTTTTGAG GAAGATTAAT AATAGCGTTT ATTTCTTTGA TTATCACACT AATTTTATCT	660
ATGaATTGCT GcTTTCTATT CGGlACACGC AATGaAATAC TTGTACCACA AGTCCATTGt	720
TTTTCCaAAA ATTTGAGGaT TCTGTGGaTG tCCTTGGaCT GGaTATATAA GATTCTGAAG	780
GTCTAACGTA ATCTACACTA TTCCTTCTAT AATTAACAAT CTCTTTAAGC CTGTTTTGTT	840
GAAAAAAATT AACATTTTTTA nTAACTAnGG	870

(2) INFORMATION FOR SEQ ID NO: 880:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880:

GGTTTACATC TTTATCAACT GTAATTTTCAT TGACATCTTC ATTCATATTT AAAACACCAT	60
TAAATGTCCC TGAATATTCA CTTGTTTGTT TAACTGTGGC AGTGACTTGT CGTTACCATA	120
TGTCATCATA TATTGTGCAA ATGTTAAAGT CCCCATGAG TTGACCGACA AAGTTGAATT	180
TATCGAATTG TATTCAGATT GTAACTTAG CAGACATTTT TAACCACGAG CATTCTTATC	240
CAAATAGnCC TTGTCTGTTA TTTTCAAGTC AATTTTCACA ATAGGATCAC TGCATCTTTT	300

ACCCTCTTTT TCTGCTnCTC ACATAACTTT CAGATGGACT

400

(2) INFORMATION FOR SEQ ID NO: 881:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881:

AAGATATTGC GAAAAGAAGT GACAGTAACA GAGGAATTTT AAAATTTATT CAACCATATA 60  
 TTGAAAATTG ATGAAATGGT GCATGCAAAT GAAGCGCGTA TTGCGTATGA AGCAGACATG 120  
 CGAAAACCTT TATATAGTAA ACGCATTAT CAAAATTTAA CATTAGACTC TATTGTTTTT 180  
 AGAAATACAT TGAGATATAC AGCGATTATG ATGATAGCGG ATATTTATTG CGTTAATGTT 240  
 TGATTTTGAA AAAGCATCCT GGATCCCGTT ATCTGCACAT CCAATATTCC TAGGGCCATC 300  
 AnCCTATACC ATGCCATCCG AGAGAGGTAT GGn 333

(2) INFORMATION FOR SEQ ID NO: 882:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 617 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882:

ATTGAAAGAA AAAGTACGCT ACTTATCCGA TGATAAAATG AAAGAAGTAG ATAATGCACT 60  
 AATGATTAGT TTAGGGCTGA ATGCAGTAGC TCACCAGAAA AATTAGGCGT CTATTATATG 120  
 TATTTTTTCAG AGATAAATAA AATATTGATA TAAAAGACAA TAACTTTATA ATAATTATAA 180  
 CTATTTCTAA ATTCTGTACG AAGAATTTTC TTATAAACAA AGATTTTAGC AAATACCAGT 240  
 TATGATATTC ATATTTTTTA TTATAAAGG ATGTCCTAAG TTTTTTAGGC TTTAGGTATT 300  
 CCATCCTAAA GTTTTTTTAG CTTAAAAGTA TCATCTACAG CAAAATTGCA AACGACAAAA 360  
 TTGATAAGTG CAATTAAATA AATGTTAGTA AGTGAATCAT AATTATCCTT GCTTAAGCAT 420  
 TTGCTTTGTA AGGGAAGTGA GGAGGCAACT AATCGTGGAA GAATTTAAGC AACATTATAA 480  
 GGGTTTAATT GATGAAAGTT TAACGTGCCA AGATAAAGTA GAATTGATAA AAAAGTGTGA 540  
 GAAATACACT GACGAAGTGA TTCGTAAGGA CGTCTTGCCT GAAGACATTG TCGATATTCA 600

## (2) INFORMATION FOR SEQ ID NO: 883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883:

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GTTGTATTAA AATTTTTTCAA TTAAACAACG AAACAATACG AAGAAAAACA TATTACTGAG      60
CCACTGGAAT TGACGAGCTT ATTAGGTANT ATTTCTCGTC TAGACAATGG TCATTTTGCA      120
CATTGCGATG CTACTTTTCGG TACTCAATCA TATGAAACTT TTAGCGGACA TCTCGCTAAA      180
GCAATTGTTT CTGCAACTGC TGAAATCATT CTTACTGTAA CTGATTTGGA CATTCAACGT      240
TCATTCAAAG ATGCAGTCGG TTAAATTTA CTTGATCCTC AATAGCACTT TACTTTTGTAG      300
TTGAATCAAA TTTTATTACA AGTTATCATA AGTGCTTAAT CATAAATGCA TTCTCGTTTA      360
TTAATATACT TCAACGAGTT AAATTAAATT TTTAATTAGG AATTGAATGC GTTTATAACT      420
ATCACATTTG aATGaATAAC TTTTTCATTA GAAAGTAGTG TktATTATTG aTGCAATCTC      480
GaTACATCGC TAGAATTTAC TTTtaATTTT ATTTATCGTC TCCCTTnTTG AGACTAAAAT      540
TTTTCAATTT ATGACTTTAA ATTTGTTTTT AGCATATATA CCT                          583

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## (2) INFORMATION FOR SEQ ID NO: 884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884:

```

GCAGAGGGCT TACGATAAAA AGAAAAATCT CGCTCGCCCG CTTCAGTCAA ACTCACAAAA      60
GcTAACGCAt GwyTGCTyCA TTCGTGCGAT ACACTTTGA TACATCTACA CCAATACTTG      120
ATATCGTTTT AATAATGCTA TCTCCAAATG CATCATTACC TAATTGTGTA ATCATAtACG      180
CTTGTTGTCC tAACTTTTGA ACTGTACAAG CTACATTGCA TGGCGCGCCA CCAATTTGCT      240
TCGTAAATGT TTGAACATCT TTAAATTCG CATTGTGAAC ATTTGGAATA AAATCAATTA      300
ACGCTTCTCC TATTGAAAAT AGACGTCTCA TTTATGTTCA TCCTTTAAAT CATATTTAGT      360
AAATTGTAAA TATACTTGCC CTGATTCTGT TGATGTTTTA ATACCTAGTG CGTCTTCTGT      420

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TGTATCAACA AAAATTTGTA ATTGCTTTAA TGGCGTGTCT AATA

524

(2) INFORMATION FOR SEQ ID NO: 885:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885:

TTAATGATTT CTTCGTATGA TTCACCAACA ATTTGCGCTA AAATATCATG CGCAAGTACT 60  
TCACCTTCAA CCATAAATTC TATTTGCTCT ACTAAAAATT TTACGTCATT CATGCTATTC 120  
ATTTTGGAA TTAACAAAGC ATATAAGTTT GTAAATTCTT TTAAATACGC AGCATCAGCT 180  
TTTAAGTAAT GCGTAATGC GTCACCTCCTA TATCTCCGGA TAACATCTTC TGAATAAAGT 240  
CATCCTCATA AATATCATAA TGATGGCTTG CAGCTGGGTA CAATTTTGTG AAATTCCATG 300  
TAAAAATCCT CCCTAAATAA AAAACTACTT CCAACATGAA GAGTTGAGGC ATGTGCAAAC 360  
TAGCCCATCA CTCATAACAC TTCCACGTGG GACTACCAAC 400

(2) INFORMATION FOR SEQ ID NO: 886:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 857 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886:

AAGAATTTAA ACAAATGAT ATTTGGAAAC ATTTTAAAGC TGTGAAAAAT AATCATGTTT 60  
ATGACTTAGA GGAAGTGCCA TTCGGTATTA CAGCAAATGT TGATGCTGAT AAGGCAATGA 120  
CTCAATTATA TGATTTATTT TATAAGGATA AAAAATAGTG AGTTGATATG ATGATAAAAA 180  
ATAAAAAGAA ACTACTATTT TTATGTTTGT TAGTCATTTT AATCGCAACT GCTTATATTT 240  
CGTTTGTAAC CGGTACAATT AAATTGTCAT TTAATGACCT ATTTACAAAA TTTACAAC TG 300  
GTAGCAATGA AGCAGTGGAT TCAATCATTG ATTTGCGATT GCCACGTATA TTAATTGCAT 360  
TGATGGTTGG CGCAATGTTA GCAGTTCTTG GAGCATTATT ACAAGCAGCA CTACAAAATC 420  
CTTTGGCAGG GCGAATATCA TTGGCGTTTC CTCAGGTGCA CTTATAATGA GAGCCTTTGT 480  
ATGTTGTTTA TTCCACAATT GTACTTTTAC TTACCATTAT TAAGTTTTAT TGGAGGTTTA 540



ATATTAGTAG GTGTTGCGTT ATTCGTATTA TTAAATGGTG TTTTAGAAAT TTAACTCAA 660  
 AACCCTTTAA TGAAAATTCC TCAAGGCTTA ACAATGAAAA TATGGAGCGA CGTATACATA 720  
 5 TTAGCAGTAT CAGCATTATT GGGATTAATA TTAACATTAC TATTGTCCCC TAAATTGAAT 780  
 TTACTAAATT TAGACGACAT ACAAGCGCGA AtATCGGTTT TAATATTGAT CGTTACAGAT 840  
 GGTTAACAGG GTTATTA 857

10 (2) INFORMATION FOR SEQ ID NO: 887:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 675 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887:

GATTTATTTT AATATTATTG TTAGAAGGAA TTTTACAAA TTCAGCGAGT GCAATCGAAT 60  
 ATTCAGACTT ACATCATAAA AGTAAGTTTG ATTCAAAGCG TCTAAGTAAT GCTAAGATGT 120  
 25 CATTCACTAA TCCAACCTCAG CTTGAAAATA AAAACACAAA CGATAGACTG TTGAAGCATG 180  
 ATTTGTTATT TCATGACATG TTCGTAAATG ATGATTGGAA AAAGGATTTT AAAGTTGAAT 240  
 TTGAAATGA GGCACCTTCA AAGAAATTTA TAAATAAGGA TATCGATATA TTTGCTGGAA 300  
 30 ATTATGGATA CGGATGTCAT GGGGGAGCAA CCAATAAAC GCAATGTAGT TATGGTGGTG 360  
 TTACTTTAAG TGACAATAAT AAATACGATG ATTATAAGAA TATACCTTGT AATTTATGGA 420  
 35 TTGACGGACA TCAAACAGAA ATAGAATAA CTGCAGTAAA AACGAAAAAG AAAATTGTTA 480  
 CTATTCAAGA ATTAGAGGTT CAATTAAGAA ATTATTTGAA TGAGAAGTAT AAGTTGTACG 540  
 AACAAAGTGG CGACATTGTT AAAGGGTATG TTAAATATTA TAATGATGAT GAACAAAATG 600  
 40 TAGAATATGA TTTTATAAT TTAAATGGTG AGTATGGTCG TGAGGTATTA AAAATGTATG 660  
 CnGATAATnA AACnA 675

(2) INFORMATION FOR SEQ ID NO: 888:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 851 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 888:

AATTCCTAAT TAACAATGCC TTCATTTAAA AACCTTCTTC CATCAATTG ATGTTTTCAT 120  
 GATATTTAGG TTTTCTCTTT TCAAGATAAA CCATTAAGTy CTCATAGAA GGTGTAAGTA 180  
 5 TATTCACTTT AkGACCTAAA ATTTCTTTAA ATACTTGCGC ATGTTCTGTT AATCCTATAA 240  
 ATCCCGTACG CTTATGTTCT TCATAAATAA GTAGAGATGC TAATTCATCA TCAAGGTCCT 300  
 CAATAGCACC ACTCACAACCT TGATATCTTT GTAACAGTTG TTCTTTTGAA CCATTTAAGA 360  
 10 TAACTTCACC GTCACCTAAG TGAATGATAT AATCAGCTAT TTTTCTAAA TCTGAGATAA 420  
 TGTGTGTCGA CATGAATATT GTTTTATTTT CATCAATTAA TTCTTGCTGA ATTATCTCCA 480  
 15 ATAGCTCATT TCTAGCTAAG GGATCGAGAC CTGAAGTAGG CTCATCAAAA ATATACAATT 540  
 CAGCATGATG TGAAAATGCA ACTGCTAGTG ATAATTTTCAT TTTTCATCCCA GTCGAAAATG 600  
 TTTTATTTGA TTTATTGATT GGTAAATCGA ACTTTTCAAG ATAAAATTCA AATACTTGAT 660  
 20 GGTCCCATTT ACGATAAAAA GGGGcAATCA TTTTTCaAG TTGCTTCGTA GTCCATCTCT 720  
 CATTAAAATA ATTTTCAGAG TAAACnAACC CAATTCTATT CTTTAACTCT ATCGGATTGA 780  
 GAGCCATATC CTCTTCTAAT ACTCTAATAA CACCAGTTTG TGGGTGATAC AAATCCATAA 840  
 25 TTAACCTAAT n 851

## (2) INFORMATION FOR SEQ ID NO: 889:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 889:

AATCACCTTC ACGCCAATAT TGATTTTCAT GCGTAAATAC TTGTGCCGTT TCATGATACT 60  
 40 TTGTCAATCG TGCGTGTTGC TGGGGGGAAT ATTTTTCAGT AGCCCAATTG GCTGCATGAC 120  
 CTTCAATGGC TAGTTCAATT GCAGGATTAA TTAAATCTTC CAATGACAAT TTAGCATAAC 180  
 GCTTGTGAAT ATAATCAAAC AGCTTTGGAA TTGCTGGCAC ACGACAGTTT TACCATGTGT 240  
 45 AGTCATATCA AAAAATGATT TATATTCGCC TGAATCnCT AGATAAAATT GGTGGGCTAC 300  
 ATGGTCAGGG TGCTGGCTCA CGGTGCATCA AACGcGnTA ATACTGCCCA GTACCTTTGC 360  
 50 TC 362

## (2) INFORMATION FOR SEQ ID NO: 890:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890:

	TTGGTTTATT CCCAAAAAGT ACGCGAAAAT TAGTAGAGAA GAATTTGAAA GTTTAAATAT	60
10	TGTCAAACCC GCTAAAAATA ATACTTTCTG GCCTGTTGCA GGATTTGCAG TGTATTAAAC	120
	AACCTTAACA AGAAAATATA TCTATTTGCT TAACATCCAT TTAGAAAAAG AAATAGTTAT	180
	ATTAACATGC TGTATGATAC TTCTAGGTGT TTTCGCATTG TTTATATATA TAAATACAAA	240
15	ATTGAAGTTA CATATTTTTG ATAAAAATAA AAGTAATAAC GAAAAGATCA TATTAATACC	300
	TACATTTAAA AATATTTGTT TATCCTTATT TGCTTATATA TTATTTGGTG GATTGTCAAC	360
	AATGGCTCTG AGTATGTTAG TAACTTCATC CCCTCAAAAT ATAATAGAAT TTCTTGCTTT	420
20	AATTGGCATG ACTGCATGCT TCTTTCTACT GAATATGTCA TCGGTTCTAG ATAAAAAAT	480
	TCATGTTATT TTAAAAACAA ATAAGTAGTA AAATTGATTA ACTTAGGTAG TATCGGATAC	540
	TTAAATGTTG GTTCATAAAA AGCAATGATT TTAAATCGAG GAGCTATCTT AGAAcAGGGA	600
25	AATAAACAG CCAAAGTTAT AAAAAGTGAA TTAATAACTA ATTATATTAT GTTAGCCACG	660
	CTTCAAATAA AAnATAATTA GAATAAGGTG GGATTGATAA TCAAnGCTAn GCGAATCTAA	720
30	AATCATCAAT AAAAACCCCA AATATAG	747

(2) INFORMATION FOR SEQ ID NO: 891:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 526 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891:

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	ATTTTGAAAT TTTAGCAGAT ACTGATAATG GTCTCGATGC AATGAACTT ATTGAAGAAT	60
45	ATAATCCTAA CGTTGTTATT TTAGATATAG AAATGCCAGG CATGACTGGA CTTGAAGTTT	120
	TAGCGGAAAT TAGAAAAAAG CATTGAATA TTAAAGTGAT TATTGTAACA ACTTTTAAAA	180
	GACCGGATA CTTTGAAAAA GCAGTTGTGA ATGAcGTGGA TGCATATGTT TTAAAGAAC	240
50	GTTCTATAGA AGAATTGGTG GAAACCATTA ATAAAGTAAA TAACGGAGAG AAAGAATATA	300
	GCGCCACATT GATGACTTCA TTTTTTGTAG ATAAAAACCC ATTAACGCCC AAAGAACAAA	360
	TTGTATTAAAG GGAAATTGGC AaTGTTTAA GTAGTAAAGA AATAAGTGAA AAATTATTTT	420

ATCGTTTTGA TGCTTGGGAA AAGGCAAATG AAAAAGGCTG GACCTA

526

(2) INFORMATION FOR SEQ ID NO: 892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 751 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 892:

15	TATTTGATGT AAAAGCGAAn GAACCATACA ATGTAACAAT TACTAGTGAT AAATACATCC	60
	CTAATACTGA TTTGAAACGT GGGCAAGCTG ATTTATTTGT AGCGGAAGGT TCTATCAAAG	120
	ATTTAGTGAA ACATAAGAAG CATGGTAAGG CAATTATAGG AACGAAAAAA CATCATGTTA	180
20	ATATTAAGTT ACGTAAAGAT ATTAATAAAA TCTATTTTAT GACAGATGTT GATTTAGGTG	240
	GACCAACGTT TGTCTTAAAT GACAAAGACT ATCAAGAAAT AAGAAAGTAT ACAAAGGCAA	300
	AGCATATCGT CTCTCAATTT GGATTTCGATT TGAAACATAA AAAAGATGCT TTAGCATTAG	360
25	AAAAAGCGAA AAATAAAGTT GATAAATCTA TTGAAACAAG AAGTGAAGCG ATAAGCTCAA	420
	TATCAAGTTT AACCGGAATA TTATTATTTG TAACATCATT TTTAGGTATT ACATTCTTGA	480
	TTGCTGTATG TTGCATTATA TACATAAAGC AAATAGATGA AACCGAAGAT GAGTTAGAGA	540
30	ATTATAGTAT TTTGAGAAAG CTTGGATTTA CACAAAAAGA TATGGCAAGG GGAATAAGT	600
	TTAAAATTAT GTTTAATTTT GGGTTACCTT TAGTTATTGC ACTATCACAT GCATATTTTA	660
35	CATCATTAGC ATATATGAAA TTAATGGGTA CAACGAATCA AATACCGGTT TTCATAGTAA	720
	TGGGATTATA CATTTGTATG TATGCTGTTT T	751

(2) INFORMATION FOR SEQ ID NO: 893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 893:

50	GGATGTTGTA CATTATTCAG ATTACTTTGA AGGGGCACAA AAATATTTGA GCTATTTAAA	60
	ATCAACAGTA GATGTTAACT TTGAAGGTTT GAAAATTGCT TTAGATGGTG CAAATGGTTC	120
	AACATCATCA CTAGCGCCAT TCTTATTTGG TGACTTAGAA GCAGATACTG AAACAATTGG	180

TAGCTGAAAA AGTAGTTGAA ACTGAAATGA TTTTGGGGTT AGCATTGGA CGGCGATGGG 300  
 AGACAGAnCC ATAGCAGTAA GATGGAGAnG GnCCAATCCG TTGACGGTGG ACCCAAT 357

(2) INFORMATION FOR SEQ ID NO: 894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894:

GCTAACCTGC AAAATTCGAT AAGCGATTCA ATaCTGAcGC CTGcATTTCG CAAATTTTTC 60  
 ACTAAATAAA TCCAATTTAA ATCACTATCA TTATATATTC TATATCCATT TTCATCTCGA 120  
 TTAACCTGGTG GAATCACACC AACCTTTTCA TAATATCTTA AAGTGTCTTG AGATATATTC 180  
 ATGAGCGCTA CGACTTCTTT AGTTTTTCATT GCGACTATCC TTTCAGTTAT GTTTGGTCGT 240  
 CTAAAGTAAT GTTGCTTTAT ATATTGTCAT CTTGTTTGA ATACTTCTTA TTTTATTACT 300  
 CAAATTTAAA TTTGTCTCTT TTTTAACATT TTACATTTCA TCGTTTTTAA TTACTTTAAA 360  
 AATTGTATAA CTkAAATATT TAAATGATA TAAWCACTAA GATTGaTAAT AtTTAATTnT 420  
 TTGGAAAATT ATnTTAAGTT GCCAATTTTG GGGGGATGCG GAAA 464

(2) INFORMATION FOR SEQ ID NO: 895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895:

AnAATGAAAG AGTTACAGGA CTTTATTGCT CGTTTCTCAG TAACGCTTCT AAATCTAAAC 60  
 AAGCAACAAG TCGTAAAAAA CAACTCGAGA AAATTGAATT AGATGATATT CAACCATCAT 120  
 CAAGAAGATA TCCTTTCGTT AAATTCACAC CTGAGCGCGA AATCGGTAAT GACTTACTAA 180  
 TCGTTCAAaA TCTATCTAAA aCGATTGACG GTGAAAAAGT ATTAGATAAT ATTTCAATTCA 240  
 CAATGAATCC AAATGATAAA GCAATTTTAA TTGGGGATAG TGAAATTGCG AAAACCACAT 300  
 TGCTTAAAT ATTAGCCGGT GAAATGGAAC CAGACGAAGG TTCATATAAA TGGGGTGTA 360  
 CAACGTCATT AAGTTACTTC CCTAAAGATA ACTCAGAATT CTTTGAGGGC GTTAATATGA 420

GCGGCTTCTT AGGCCGTATG CTATTTAGTG GAGAAGAAGT TAAGAAAAAA GCTAGTGTAC 540  
 TTTCAGGTGG AGAAAAAGTA CGTTGTATGC TAAGTAAAAT GATGTTATCA AGTGCAAAC 599

(2) INFORMATION FOR SEQ ID NO: 896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1057 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896:

TCATTAGTAG AAATCGTTAA AGATGCATCT TGCAATTTAA AATCCGAATC TTTGTATTGT 60  
 TTGTTACAC TATCTACGTT TAACAATGTT GTCATATCCA TGCTCCTCTT TGTTTAATTT 120  
 TAATAAAAC GTCTTCTCTT CAATAAATAA CTAAAGGCGT TATATATGAA AATAGCAATG 180  
 ATAAGTAGCA AACTAAAGCT TTGATTAATT CCAGTAGTAA TTGAATAAAG CCCAATTACT 240  
 ACAATGGCTA GTATCAATAT TGATAAGTTG ATCGCATATG TTTTAAATAA TGCAATTAAT 300  
 TCTATATGGC GTTCACCTTC ATCCAATATT TCCAATCGCT TTTCAAGTGA ATTCTTATCT 360  
 GCAATTTTTG GTATTCTGTC ATCAAACCTT CTATTAAACA GTGTAAATTG TGTATTGAAA 420  
 ATAGCACTAG CAAAAAATGG TATTAAAAAG AATAGTATTG CATTTGCTGC AGCGTGCCCT 480  
 ACCACAAAAA TAAGCAATAC TAAAAAAGCA ATAAGTGTCT GCAGAATACT TAATATACTT 540  
 CCATTTAAAA CATAACGATT CGCAAGCAAC TCATATTGAT CTGTTGCATC GATATCTACC 600  
 TCTTTATCTA CAAGTTGCTT ATACTTCAAT GCACGTCTTT GATTCATCAA AACAATGGCT 660  
 TCTACCAATA TGATAATAAT CGTCGCAACA ATCGATATTA CAACGACATT GTTATATGTC 720  
 GCAAACGTCA AGTTCTCAAT ACCAAATCCA TCAAATTAC CTAAAATTCC ACCTATGATA 780  
 CCCCCTACAA GTCCACCCAG TAAAAGATAT CCGATATATC TTAGTATTTT CATGCCTCAT 840  
 CCTCCTCAAT AATAAAAAA GTTCCACCG TTTCAATTGAA AATGCGAGCA ATTTTTATTG 900  
 CCGTTAATAC TGATGGCATA AAATTGTTTC GCTCAATTAG CGATATGGTT TGTCTTGAAA 960  
 CGCCCGCTTG TTTAGCAAGT TCGTTTGGT TTAAGCCATC TCGTGCTCGT AATTCTTTCA 1020  
 ATCGATTACG CACATCGCAT CAACTCCnTA ATTACAC 1057

(2) INFORMATION FOR SEQ ID NO: 897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897:

5 AAATTATTGA GTTAACAAAT CATTACGGAG CACATAATTA TTTACCATTG nCAATTGTCA 60  
 TTTCAGAAGC CGAnGGGGTA TGGGTAAAG ATCCTGAAGG CAATAAATAT ATGGATATGT 120  
 GAnCTGCATA TTCCGCTGTT AACCAAGGTC ATAGACATCC GAAAGGTATT CAAGCATTAA 180  
 10 AAGATCAAGC TGATAAAGTG ACTTTACTCT CACGTGCTTT TCATAGTGAT AACTTAGGTG 240  
 AATGGTACGA AAAAATTTGT AAAGTGGCAG GTAAAGATAA AGCTTTACCA ATGTAATACA 300  
 GGTGCTGTAA GCAGTAGAAA CAGCTTTGAA AGCAGC 336

## (2) INFORMATION FOR SEQ ID NO: 898:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898:

25 TGnTGnTTTC TTATTGTTGA CCAATTATTT TGCATACCAA ATCCAAATCA TGTATTTATC 60  
 AATCACATCC TAATGCTAAA TCCAATGTAT TACATTGTTT AATGGTATAG CACAATCTAT 120  
 30 CATATTTGGT ATATCAAGTA TGGAAAACAT TCCATATCAT TTTTACTTTA TTTTATTCTT 180  
 ATGTTTAATA GCTGCAGTAA ATTTCTGTATT AGCAGGTATA CGACACACGG CAATTTATAA 240  
 TAAAACATCT AAAGTGACAC AAAGTGGTAA TCAACAGGGA GTTTCAAAGA TAGTCAGACG 300  
 35 GG 302

## (2) INFORMATION FOR SEQ ID NO: 899:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899:

45 CCACTAGCTG ATACAGTAGG TATACCAAGA TTCGTCATCG TTACGACATA TCAATTTGGT 60  
 50 CAATATGCGA TGTTATTCTT AGCGCCGACT GGAcTTGTTA TGGCCACACT ACAAATGTTA 120  
 AACATGCGAT ATTCACATTG GTTCCGATTT GTATGGCCGG TAGTTGCTTT TGTATTGATT 180

TATAAAAAAT ACTAATGGGG TTTTATGCAT CTCGTAGGTT TGTAGAAATA CTAAACTAAG 300  
 CGAGGTGCAT TATTATTTTTT GATTAAGAAA ATAATGACGG TAATGATAAC ACTAGTAAGT 360  
 5 AATTGATACA ATGCTCTATT TAATAATGAT ATTTTTAAAA TTTGTTTTTA ATGTAATGTT 420  
 AGATCTATGG TATATTATAT TTAACGTGGT AAATATGTAT TTGCTGTAA 469

(2) INFORMATION FOR SEQ ID NO: 900:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 900:

CTTTATTGGT AACTCTCTAT aATATtTTaA CATTTTTACG CTATCGTGCA AACGCAAcCa 60  
 CTTTGAATTy TCTGATATTT TTAGCATATA ATTTACACCC TGCACGATGA ATTGTTAATC 120  
 CAGTTGTATA AATATCGTCA ACGAGTAATA TTTCCCTTACC ATTTAAATCT AATTCCGTAT 180  
 25 CAATAATAAA TGGATTTTCA TCTGCCAGAC GCTCTTTCTT AGTTAAATGA GACTGTTTTG 240  
 GTCTATTTGA CATCTTTAAA ATCTTATCaA AGCGAATCCC TTTAGCTTTT AGTACTGCTT 300  
 CTACCGGGTT AAATGTTCTA GATAAATCAT GTGCCGGCGA AGAAGGAATT GGCACAATAT 360  
 30 AGTCATAAGA TGTTTGTGGT ATTTCAATCA AATGTGCCAA TAATTCACAT AAATAATAGT 420  
 CTTTCAAAAA TTTATACTGA TGTATCATCT CTTTCATTAA ACCGTCATAT TGAAATTGAC 480  
 AATATAATTG TTCCATTAAA TTAAAGTGTG CCGATAGAAA CTTGCAGTCT AAACAATACG 540  
 35 CTTTCATCTTG ATTTAAGTGT TTTAAGCACC TTGAACATCG CCTTGCTTTA ATATCAAGTT 600  
 TAATATTGTC CCAATTCTCT TTGCATCTGT CACATAATCT ATTAGGTTTC TTGAACAAAT 660  
 40 TATAAATGGT TATATTTTCA TATAACTTAG CACCACAACCT CAAACAATTA TTCATCAATC 720  
 CAACCTCTTT TTAATGCTAA TTTGTTTCATC CTTTGAATCT CTTTTTTAGC TTGAATCATA 780  
 TTCATACTTA CCCCTTnCAT GAAAAACAA TACTTTTTCC A 821

(2) INFORMATION FOR SEQ ID NO: 901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



TGATGCTATT AAAAAGTTAA TTGTGCGGTC TGTTTTGATA ATTTTAATAA TAACTTCAGG 60  
 TAACTAAAA TCCTAATATT GAAAAAACAA AGCCATTTAA AACATAACCT AGTATATTCC 120  
 5 ATGTATGATT GTAACTCATT TGCCAGTnT GTACTGACTT GCATAATTCT GTCACGTnCG 180  
 AACCATGTAC AAGCCTGCAA CTACTGCTGA ATGATTCCTG ATGCGTGAAC AATTCAGCAA 240  
 TTAAATACGT AACAAATGGT GTTACAATTG AATAATTGAA ACATATTAAT GTTTCATATC 300  
 10 CTCGACGnCA TCAATGTTAA TCCGACCTT ACTAATGCAT ACCTATAAG 349

## (2) INFORMATION FOR SEQ ID NO: 902:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902:

CAAGTGGTAT AAATTTACCT GGTGAAATGT AGGTCGTGGT GGCGATGATA CATTATTCGC 60  
 25 TAAAATCGAC GCGTTGTTA AATTCGAACG TAAAGGTCGC GACAAAAAAC AAGTTTCTGT 120  
 ATATGCAGTT AGCTGAATAA TTTTGTCTAG TTAACACCAG AAAGTGAATC TTCTGGTGTT 180  
 TTTTACTTTT TATAAAATGT TTTTCATTAT TATTTTCATT ATGnTATTTA AAAATGGGGA 240  
 30 TTTTAGACGT TATACTAAAT GTGCACTGTA TAGGGGCCCT AATCACTAAC TATAGGGGGA 300  
 CAAGGATACA GTGCAGCGTT AAGGATAACT GnCCACATTG GTCTGGGAAT ATAGGATTTA 360  
 AGCAAGGTTA TAAAGTACTC nTAGGCCCTA 390

## (2) INFORMATION FOR SEQ ID NO: 903:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 903:

GGAATAGACG TATATGCGCG TTGAATTTAA TCCTAATAAG CTTTCGCATG ATGAAGTGCT 60  
 TTGGTTAAAA CAAAATATCA TCAGTTATTT GGACGATGTT AGTTTTACGA GATTAGATTT 120  
 50 GGCTTTTGAT TTTGAATTTG ATTTAAAATG ACTATTATGC ATTGTCAGAT AAGnCGGTAA 180  
 AAGAACTAT ATTTTATGGC CGAATGTAAA ACCAGAACAA AATATTTTGG TGTnCGAATA 240

GATTCACATT CTATGCGGTG GAATTGATTA AACG

334

(2) INFORMATION FOR SEQ ID NO: 904:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904:

CAAGTTGGGG ACACTGTTTC AAATGAAACA ACAGTGTGTA TTTTAGAGGC AATGAAACTA 60  
 TTTAATGAAA TTCAAGCAGA AATTTTCAGGT GAAATTGTTG AAATCTTAGT AGAAGACGGA 120  
 CAAATGGTAG AGTATGGCCA ACCGTTATTT AAGGTGAAAT AATGAAAAAG GTTTAATTGC 180  
 AAACCGCGGT GATTCGCAGT TAGGATTATT CGCGCTTGTC GTGATTTAGG CATCCAAACT 240  
 GTTGCATCTT TCTGAGGGGA TAAAGATCGC TACATCTCAA ATGCTGATGA GGCATATnCG 300  
 TGGGCCnCTT GTCTAAGGTC ATATTTAATA TCCG 334

(2) INFORMATION FOR SEQ ID NO: 905:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905:

TTCACCCTGT AATTCTTaAC CGTCAATTGA CCTTTATGCA GATTTAATAT TCCTAAAACG 60  
 TATAACTCTT CTAATGATAA TTGACACATA TTAAATAAC ACTTTAGATT CCGCAATAAT 120  
 TCTTGTGACG ACAATAAATA CGATACATAG TCACAACTAA AATCAAATGT ATATTGACCA 180  
 AAATAACGTT CAATATAGTC ACTAAGCTCA TTATTCATAT ATTCTATTTn ATCTATATGC 240  
 ATTTTATTAA TCGAAATAGT CAATTTACGT TGATCCCTTT GATCTCTTCC TTTCAATAGC 300  
 CATTGATGAT TGnTAAATA ACTTAACATT TGAAGAAGGG CCATCTTAGA TTGGATTTCT 360  
 TTCATTnTTA ATAACTATC TATTGAAGCG CTATTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 906:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1478 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906:

5 TACATTTTTC AATTTATGGC AAAATnCACa ATTTTCATCG AAATATTTTG TAñAnAATCA 60  
 TTGCTAGGTG ATGAGTTATC TCGGTTAATT ACAAAACGAT ATCTAAGTTT AAATATTAGA 120  
 TCATAAAAAA ACTATCTACT GAATATCCCT CCATAGCATC ATTTTCTCTAA GCAAAAGTTA 180  
 10 AACTTAGTTA GATAAAATGC AAATGAGATT ATTGTAGATA GTCTCTTTTT AATGTTTAAA 240  
 AATGATTAAT GCCaTAAACA TAAATAATTC CaAAGAATGC CGCGCCACTA AGCACTGTTA 300  
 ATATAAGACT TAGTAACAAT GTGCGTTTAT AATGTTTaAC AAATGctATG AACAAAATGA 360  
 15 CTACATTATA CGCAAAGAAA AGTCCGAATA ATGTCATTGT TATTTTCAAA TCAGAATAGA 420  
 AAATATTTAA TAGTAATACA ATGACTGCAT AAATTAAATA CGGAATAACT ATAAATTTGC 480  
 GTTCAAATCT TAATTGTTTCG AAaCgtTTAT CTTCGTTTGT CATGATATGC TCCTTTATGA 540  
 20 TTTAAAAGTA AATAAGTTTA CGGAAtATCT TGTCCGaTAA TAGCGGTGTA AAtGTCAAAC 600  
 CACGACTGAT CATctAAATT AAGTkGTAGC CctTCGATTG CTTGATCAAT ACGCTTTAAC 660  
 TGACTTGTTT CAAGTATCCG GCATGATACG ATGCGGTATT TTTACTAACC ACGCTATCAT 720  
 25 CACAGCTGTG TCACTyACAC mATATTTGTC AGCTATTGAT TGAACAACTT TCATAATACG 780  
 TTGCGCTTTA ATATCTTCCT TGTCGAAAAT TTTACCGCCT GCAAAAGGAC TCCAAGCCAT 840  
 GATTTGAACA TGGTTTTGAT ACATTGAATC CATTGTTCCA TCTTGTA AAC TATCAACGTG 900  
 30 ATATGGCGAT AATTCTAATT GATTGATGCT AATATGTAGT CTTTCTTTCA TAATATATTG 960  
 ATTTAACAAT TGGTATTGTG AATGATTAAA ATTCGACACC CCGAATGACT TCAACTTACC 1020  
 35 TTGTTTAAACA AGTTTAGTTA ATGCATCAGC AACTTGTTCT GGaTCCATCA ATGGTGaAgG 1080  
 ACGATGAATG AGTAGACTAT CTAAATAATC TACATTCAAA TTGATTAAATG ACTGTTCAAC 1140  
 AGATTTACAG ATGTGCTTAC TACTCAAATC ATAACGATGT CCATTTGTAA AATCAAATTG 1200  
 40 CTTAGAAGGC AAAATGATAC CACATTTTCGT AACAAATTGA ATTTTATTTT TTAATTCTGGG 1260  
 TGATAAATCC AAAGCATTAC CAAACAGTGA TTCACATTGA TAATCTCCAT AAATATCAGC 1320  
 ATGATCCATC GTTGTAATTC CACGTTCAAC TAATTCATTT ATAAAATAAT TTAACCTTTT 1380  
 45 CGCAGTCATC TTCCATTCAT TTGCACGCCA AAAACCTTGT ACAAGCCTAG AAAAATGAAC 1440  
 ATAGTGATTA ATCATTATTT GTTCCATATn TCATCCAC 1478

## (2) INFORMATION FOR SEQ ID NO: 907:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 543 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907:

	TTCTATGAGA ATAGATATTG TTAAATTAAG AAAGTAGTCA ATTTTATTAT GACAAAAGAA	60
10	AGAAGAACAT TTAGTTCAGA GTTTAAGTTA CAAATGGTTA GATTATATAA AAATGGTAAG	120
	CTTAAGAATG AaATTATACG AAAGTATGAT TTAAAACCTT CAATTATCTC AAATTCGATA	180
	AAACAACACC AAAATACTGG ACCCTTCAAT CATCAAGATA ATTTAAAAAG TGATGAAAAA	240
15	GAGTTAATAA AATTACGCAA AGAAGTTCAA CATTTAAGAA TGGAACATGA TGTTTTAAAG	300
	CAAATTTTAA AGTTGATTTA GAAACTGAAC TTTTAAAGA TACATTACTT GAAGATTCTA	360
	ATTTATCTGA TTATATAAAG AACCAACTTC CAACGATATG GAGAGACTAA GAAATAGTTT	420
20	AAATTTATTT AATTTCATA AAAACTCATA ATAATATTTA AGTAAGTTAG ATTGCTTTTA	480
	GCATTAGGAA TTCGCTTATA ATTAGATGTT CAATATAGAC TTTTTCACAC ATACATGAAC	540
	TAT	543

25

(2) INFORMATION FOR SEQ ID NO: 908:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 751 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 908:

	TTTnCGGTnG AACATGATTn CGATATTACT TCTAAAACGA TTCAACCAA ACCAGGAGAA	60
	AGTGTGGAC GTTTAGTTAA TGTCGATTGT AAAGATACAG TACTGGAGTA TTCAGAATTA	120
40	GATCCAGAAG TTGCAAATCA ATTTAACAAT GCTAATATCG GTATTCATGC ATTTAACTT	180
	GGTTTTATTT TAAACGCTGT AAATCGTGAG TTACCTTATC ATTTAGCTAT TAAGAATTTG	240
	AAGCAATTAG ATGAGAACTT TGGTGTATT GAACAACCAA CTTTAAATTT CGAATTGTTC	300
45	TATTTTGACA TATTTACTTA TGGAAGTAGT TTTGTCACGT TACAAGTTCC TAGAGAAGAA	360
	GAATTTTCAC CTCTTAAAAA TAAAGAAGGT AAAGATAGTG TTGCAACTGC AACAGAAGAT	420
50	TTACGTAGAA TGGGTTTAAT TTAATGATAG GCGGTGACTA TGATGTCCAA ATCAACTAAA	480
	AAAAGTAATG ACACAATCGT AGAAACATTT AAGGATATCA TCCCTTTATC ATTTGGAGAA	540
	GAAATTGGTA ATGCGGCATC TCATGGTGTT GCAGCTTTGT TAACATTATT AGTGTTACCC	600

55

TATGTTATTT CTATCTTTAT GATGTTTATT TCATCTACTA TTTATCATTC TATGCAAAAT 720  
 GAAACACCTC ATAAATATAT TTTAAGGATT A 751

(2) INFORMATION FOR SEQ ID NO: 909:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 909:

AAATTGTCAC AATTCAGTCT AATTTAAAAG GAAGTTAATT ACAAATTAA AAAATCATGC 60  
 ATCGTGTCAT TTAGATATTG AAAAAGATGA GTCAAATTG TTTATATAT TTTCCAATAA 120  
 CAAATTATTA TATCTAAATA TACAATCAGA AATATATGAA TAGAAATATC AATAAGAAAA 180  
 ATAATATGAT TAAAATGAT GAATGGCATA CTTATAAAGT GTCTAAATAT TGGCGGTCAA 240  
 TATTACTTAC AAACACGAAT GTTAAGTAAT GTAGACAATG cTGaAAAAAC AATaAGTAGa 300  
 AACTCTATAT AGAATGTTTCG TTTTATTTT TaATAATTGa ATAATCaTTA TTGGGTGGAT 360  
 TTTAATATGG nATTCCGGTC GGCACACGGA TTAC 394

(2) INFORMATION FOR SEQ ID NO: 910:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1022 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910:

TAAAGCTAAG AAAAAAGAAA AACGTAAAGC TTATAACCAA CGAATGAAAG AACGTAGGAA 60  
 AAATCAACCT AGCGCAGTTA GTCAACGTCG AATGAATTTT GAAGAGCGAC GTCAAATTTA 120  
 CAACAATGAT ATTTCTGAAG AACGCAATTC AAGTGAAGTT AAGGACAAAA AAGAGCAAGA 180  
 ATAAATATTG ATGATACCCA GATTAGTAAG CAGAGGTCTT TTGCTTATTA ATCTGGGTTT 240  
 TTATATGAGG TTAATTATCG ATAACGTTTA ATTAAAGTGT TTAGGTGTCA TAATTTTAAA 300  
 TGACGATTTC CCCATTACKA TACACCTAAA TtATCATCAA TCTGaATTCA GATGTTTATk 360  
 ATAAAAATTA GATGAAAAAT ATGTTAATAT ACAAGKaATT TAATGTGcGk ATATCTATAG 420  
 GCTCGTAGTA TACTTATTAA AATATTAAAC AAAGAAAGGA TTTTAAGATG AATAGAAAAC 480

GGCTATCCTA TTTTCTTTA AAAAGTGGTA ATGCATCACA ACGTGAAGAA TTAGCGAAGC 600  
 AATTATCTCA GAACGGTGGC AAGGTTTCTT TAGATATGCT TCAGACAACA ATGGGTGCAT 660  
 5 TAGCAATTAT TTTATTAATT TCAACACTTT ATGGTATATT TCGGACAATT TGTATTAAAG 720  
 GACGTAGAAA ATTATCGATT ATACTTTTTG TTATCGCGAT AATTGTAAGT TTGATGGCTC 780  
 TTAATTTAAT TGCAATTGTC TTATGGGTTA TCGTGATGAT TATGTTGATT TCTAAAAAAG 840  
 10 AATCAAAAGA AACAAACACAT AAGGACGATG AGTATATTTA TCATTAATAT GTTCATAGCA 900  
 AAAGAAAAAC CATTAAAATG TTAAGTTGTT AATTATTAGA TACAACCAAC ATTTTAATGG 960  
 15 TTTTATTTTT AACTTTGTAG TTCTTGAAT GTTTGAACGA TTAAATAGAC ATTTAAAATA 1020  
 CT 1022

## (2) INFORMATION FOR SEQ ID NO: 911:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 911:

GGTACTTTAT TTTTATTTTT GGTCTTAGTG ATTTTACAT TATTACATA TAAAGCGCCT 60  
 AATGGTATGC GTGCCATGGG TAGCATTAGC TAATGCAGCA ATCGCAACAT TTTTAGTGGA 120  
 AGCATTTAAT AAATATGThG GTGGCGAGTA TTCGGTATTA AATTTTTagA AGAGCTAGGA 180  
 35 GACGCTGCGG AGGTCTAGGT GGTGTCGCTG CCGCTGGATT AACAGCATTa GCTATCGGTG 240  
 TGTCAACAGT ATATGCATTa GTTATAGCAG CCGC 274

## (2) INFORMATION FOR SEQ ID NO: 912:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 679 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 912:

CTTTAATTGT TCACTTTATC ATTATTATCA ATCAACTCTA TGATATGAAA TTGTGTTAGA 60  
 GATAAATCTA GTTCCTCATT TTCCTTTTTA TACTGTCTTC TTTATCGGC ATTTTCTCTT 120  
 TCTATAATAA ATTGTTGTAA TTTTAAAATA ACTTCTCTCT TCATATCCAC TATTATTCCT 180

TTGTTGTAAT TAACATATAT TTACTTAGTT ATGCACCATT TATTCCGCAT TTCACAAATC 300  
 CACCTATAAT ACAAACATATC ATTTTAAATA AGCAGAATTT ACCCTGTCTT CCACACAAAT 360  
 5 TGTTCGAC ACTTTAATGT GCCTACTATC CAAAAAGTT ACTCATAACA AATTGCGCAT 420  
 TTTAATAAAT GTAGCAATGC CATTTCATG CTGCAAAAAT ACTCGTATTC ATATTTATGT 480  
 10 TTTATATTAT TAAAGTTTTT TAAATCCATA TTTTATAAC ACTTGCTATG TGATAAAATT 540  
 AATnTTATAT ATAAAATCTT AAGATTCAGA TTATTTAATA GCAAAGGAGA TAGTGATATG 600  
 GATGTTTTAA CAATAGAACA TTAAACAAAG AAGATAGGCA ACAAACGAT TCTCGAAGAT 660  
 15 GTATCATTTA AGCTGAAAC 679

## (2) INFORMATION FOR SEQ ID NO: 913:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 913:

GCCATCCTTC AGTGCTAATT TTTTCAAATT CTAATGCAGA TGCACCACTA ACCATACCAT 60  
 30 ATATAAAGAA AAAGACCACG AAAGnAATAA GTAGTAGTAT AGATGCACAT ATCATAATGA 120  
 CATTGGAGTT TTCAGCGCCA AATTATAATG TCAATGsGAA AATGATAGAG TATGCCCCCTA 180  
 TGATACCAA ACTCATTAAA CCTGACATAA TACCAATCAT CACACTTTGG GTCACAATCG 240  
 35 TAGTCACAAC TAATCCAATC ATTAACTTG CACCGAATAA GATTAAATAA AAGGCAAAGT 300  
 ATGACTTAAT ATAATCACTA CGTTTAACCG GTAAAGTAGA TACATAATAC ATCCATCTTG 360  
 AGTCTTTTTT aTGTTTAATA TTATCAGTAA TAGGTGTGAT TAACATAACC CCAGCCATkG 420  
 40 CCGAACTCAT CAACGGATTA AATACTGCAA AGTATCCTGC AGCTATAATA GCGACTATAA 480  
 AATAAATATA TGTTTGcnTT CTCGTTGCAT AAAAACTACT TAGGAACATA CCTTTCATTA 540  
 45 TACTTCACCT CGCATTATGA TTTT 564

## (2) INFORMATION FOR SEQ ID NO: 914:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AAAGAAGAAG CAAGTGCAAA TAATTTAAGT GATATATCAC AAGAGGCACA AGAGGTTCAA 60  
 GAAGCTAAAA AAGAAGCACA AGCAGAGAAA GACAGTGACA CATTAAGTAA AGATGCAAGT 120  
 5 GCAGCAAAGG TAGAAGTATC AAAACCAGAG TCACAAGCTG AAAGATTAGC AAACGCTGCA 180  
 AAACAGAAGC AAGCTAAATT AACACCAGGT TCAAAAGAGA GTCAATTAAC TGAAGCGTTA 240  
 TTTGCAGAAA AACCAGTTGC TAAAAATGAC TTGAAAGAAA TTCCTCAATT AGTTACTAAA 300  
 10 AAGAATGATG TATCAGAGAC AGAGACGGTT AATATAGATA ATAAAGACAC TGTAAACAA 360  
 AAAGAAGCTA AATTTGAAAA TGGTGTTATT ACACGTAAAG CTGATGAAAA AACAACTAAT 420  
 15 AATACAGCTG TTGACAAGAA ATCAGGTAAA CAATCTAAAA AAACAACACC TTCAAATAAA 480  
 CGAAATGCAT CAAAAGCATC TACAAATAAA ACTTCAGGTC AGAAAAAGCA ACATAATAAG 540  
 AgATCATCAC mAGGTGcAAA GaAACAAAGT AGTTcmAGta AGTCaACTCA AAAGAATAAT 600  
 20 CAAACTAGTA ATTAAGAnTT CAAAAACAAC AAATGCTAAn TCC 643

## (2) INFORMATION FOR SEQ ID NO: 915:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915:

AGGTTTAAGG GAAAAATCCT ACCTGGAGAG ATTCAAAAAC TAAATGGACT ATTTCCAAAA 60  
 35 ATAAAGGGCA ATCACATGGT GGTTCCTATT GGAAGTTAAT AAATAACAAA GGAAAAAGAA 120  
 TAGCTTCTTT AACTAAAGAA GGAAAAATCT TAAGGGAATA AGGTGTTGTA AATTATGTGC 180  
 TTTGATATAA ATAATTTGGA TATAAAAAG TTGAATTTTA GAAAGGTAAA AAACGCAATT 240  
 40 CATTTAAGTT TAAGTGGCGA TAAATACCAG TTTTGGAGG ACGGTAAAAC TATCAATAAT 300  
 ACTTATTTTT TAGCTGTATA TGATAATGCA ATAACATTT TTGAAGATTT GTTTtCGCCT 360  
 tCTGATTCTA TAAATTTGGn TCATGTAGTA TATGTTTATA 400

## (2) INFORMATION FOR SEQ ID NO: 916:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



CCCAAAGTTC GATAGTGTAT TAGTATTATC TTAATAAAAT GTTAGGTACA ATAAAGATGA 60  
 TTATATATCG GAGGTTAGTA TAAAAATGTA TGTAGATCGA AAACCATCAC TATATTTAGA 120  
 5 GGATTTGCGA CATGATTTTA AAAATAGTTT AAGTAAATTT GAAAATGGTG ATGAAGCATT 180  
 TGATACGTTA TTAGGTTTCG TAGAGTTAGA TCATATTTAT TCGTCAGCAC TAAAGGAAAT 240  
 10 AAGCACTAAA CTGAGTATTT TAGATGACAA TTTCAATCAC ATTTATAWAC ACAATCCTAT 300  
 ACATCATATG GAGCGACGTG TGAAAGAAAT GCGTAGTTTA ATAGAAAAGC TTAATCGTAA 360  
 AGGATTACAG ATTAGCGCAG AAAC TGCCAA AGAACATATA 400

(2) INFORMATION FOR SEQ ID NO: 917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917:

GAAAATTACT ATGAAGATTG CATTAGGATG CGACCATATT GTTACAGATA CAAAAATGCG 60  
 TGTATCTGAA TTTTAAAAAT CAAAAGGACA TGATGTCATT GACGTAGGAA CATACGATTT 120  
 30 CACAAGAACA CATTATCCAA TTTTGGTAA AAAAGTTGGC GAACAAGTTG TTAGCGGTAA 180  
 TGCAGACTTA GGTGTTTGTA TTTGTGGAAC AGGTGTTGGT ATTAACAATG CTGTAAATAA 240  
 AGTACCGGCG TTCGTTGAGC ACTAGTACGT GATATGACAT CAGCGTTATA CGTAAAAGAG 300  
 35 GAATTAAATG CGAACGTTAT TGGCTTCGGT GGACGTATTA TAGGTGAGTT ATTAATGTGC 360  
 GATATTATCG ATGCCATTAT TAATGCTGGA TTATAAACCC 400

(2) INFORMATION FOR SEQ ID NO: 918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918:

GTCTCCAGCC ATTWACCAC ACATACCTGT CCATTTACCT TCTTTATGTG ACGCTTCAAT 60  
 AACTTGTTTA ACTAAACGTA AGATTGAAGG GTTATATGGT TGGTATAGAT ATGATACACG 120  
 CTCTGACATA CGGTCAGCAG CTAATGTGTA TTGAATTAAA TCATTTGTAC CGATACTGAA 180

GATTCCTAAT TCTATATCAT CCGAAATGTC ATGACCTTCA TTTTAAAGGT TTTCTTTTTC 300  
 TTCTAATAAT ATAGCTTTAG CTTCTCTAAA TTCGTTAATT GTTGCAACCA TTGGGAACAT 360  
 5 GATATTTAAC TTACCATAAA CTGATGCACG TAATAATGCA CGTAGCTGTG GTCTGAAAAT 420  
 ATCTTGTTGC GCAAGGCATA AACGAATCGC ACGGTAACCT AAGAATGGAT TCATTTCTTC 480  
 10 AGGCAAGTTT AAGTATGATA ATTCTTTATC TCCACCTATA TCTAAAGTAC GTACAACAAC 540  
 ACGTTTACCG CCCATTGCTT CTAATACTTC TTTATAAGCT TCAAATTGTT CTTCTTCTGT 600  
 AGGCATTGCG TCACGACCCA TATATAAAAA CTCAGTTCTA TATAAGCCGA TACCTTGTGC 660  
 15 ACCATTTTCa ATAACACCTG GCAAATCATT AGGTGTACCA ATATTTGCAG CAAGCTCTGC 720  
 GTGAACACCA TCAACTGTAA CAGTATCAGC ATCACGTAGw TTTTGTAATT CTTTCTTGTC 780  
 AGCAAAATAA CGCTCACGTT TATCTTGATA AGCGATTAA TCATCTTCAG TTGGATTAAAC 840  
 20 GATTACATCA CCATTTAATC CATCTACGAT AATCATGTGC CTTGTTTAA CTTCTTGAGT 900  
 AATTGATTTT GTACCAACAA TTGCTGGaAT TTCTAAAGAA CGACTCATAA TTGCAGAGTG 960  
 aCTTGTTCTT CCGCCAATGT TTGTAGCAAA ACCTTGACG AATTCTTTAT TTAATTGAGC 1020  
 25 AGTATCAGAT GCGGTTAAGT CATTCCCTAC AATAACAACG CTTTCATCAA TCATACTCGG 1080  
 ATTCGGTAAT TCTACACCTA AAATATGTGA TAACACACGT TTAGAAACGT CGCGAATATC 1140  
 30 AGCCGCACGT TCTTTTCATGT ATTCGTTATC CATAGATTCA AAAATTGTAA CAAATTGTGT 1200  
 TGThACATCC GCTTAATGTG 1220

## (2) INFORMATION FOR SEQ ID NO: 919:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919:

45 TTAGATTGAC TGCAAATGCC GACTCAAAAG AACAAGCACA ATCATTGATT CAACCTGTTA 60  
 AACAAGAAAT TCTTGATCGT ATTGGAGAAT ATTATTATGG TTCAGATGAC ACATTAATTG 120  
 AGCAAGCTGT AATAAAGAAA ATTCATGAAC CTTTGTAAAT ATATGATGGT ATTACTAATG 180  
 50 GTGCTTTATA TCATCGATTG AAAGAAGTGG ATTTAAACGA TGTTCTAAAG GGTATGATTA 240  
 ATCACAATGA AAACCTTGTt GATATTAATa AACCTATTGA GCaGCAATTA AAAGATGCAG 300  
 TGCAATTTGT TAATA 315  
 55

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920:

ACTTTGTAAA CCTACAAATG TAATGAATAA TCCTATACCT GCTGAAACAG CCATCTTCAT 60  
 TTGATAAGGA ATTGCATTAA TAATAACTTC CCTAAACCCT GTGACGGTTA ATATCGCAAA 120  
 GAATATACCT GAGAATAAAA CGCCTGTAA ACCAACTTGC CAAGGAATAC CCATGGTTAA 180  
 CACAACAGTA AATGCAAAGA ATGCATTTAA TCCCATACCT GGTGcTAACG CAATTGGATA 240  
 TTTAGCTATT AGCCCCATGA ATAGCGAGCC TACAAATGCT GCTAATGCAG TCGCTACAAA 300  
 AATGGCACCT TGGTCCATTT TCATATCTTC TGATACGCCT TTAACACCTG CTAAACTTAA 360  
 AACTTGCGGG TTAAGTCTA AAATATAGGC CATAGATAAG AAAGTTGTGA TACCGCCTAA 420  
 GATTTCTCTT TTA 433

## (2) INFORMATION FOR SEQ ID NO: 921:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 921:

CTATTTTATT TGTATAGCGC TTGATGTAAA GTTATTTTAG CTGTCATACT ATGTGCTAAA 60  
 CCAAATTCAG TTGTGTCATA TCTTCGCTTT TTTGTCCTG TTATAATAGG TATAATCGGA 120  
 TATAATGAAA AGGkGAGGGA GGATTCAAAA TCGTAGGTT ATTATATTCA TTTCTTTTTT 180  
 ATATGATCAT AGGTTTATTT AGTGGCTTTT TCTATAGAGA GCTAACAAAA GCATATGATT 240  
 TTAAGGTAC AACACAATTA TCACTGTAC ACACACATAC ACTTATTTTA GGTATGTTTA 300  
 TGkktTTAAT ATTATTACCA TTGGaGAmGT TATTTAAATT ATCAAGTTAC TACTTATTTA 360  
 ACTGGtCTTC TATGTATATA ACATAGGTGT TATCGTTACT ATAGGTATGA TGGTGACAAA 420  
 AGGATTCTTC CAAGTCACT 439

## (2) INFORMATION FOR SEQ ID NO: 922:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 922:

	GTAATATCTA TATACGTATA TTTAAATGAT ATATCTGGGT ATTTTCTTTT TAATAGCGGC	60
10	TGTAGCCAGT CATAAATATC TtTCGaTGTT GGC GCATTAA CGCAACTTGC ACATATAACA	120
	TCTGCCCCAT AAAC TACCAC ACTCACGTGC TCCATATATT TATCCCCCAT TGGTTTGATA	180
	GATTTTTTATT ACACTATCTA TTATAATATA sTmATAAAGA TTATCAAATT CATCTCTCGA	240
15	AAGGAGACTT GCCTGATGCC TACTGAAGAT ACAACGATGT TTGATCAAGT AGCAGAAGTT	300
	ATTGAACGTC TTCGTCCATT TTTATTACGT GATGGTGGCG ACTGmTCATT GATTGACGTG	360
	GAAGACGGTA TTGTAAATTA CAATTACATG GTGCATGGTG GnACATGCCC CAAGTTCTAC	420
20	AATCACTCTT AAAAGCTGGG TATTGAGCCG TGCATTACAC GAAGAAGTGC CTGG	474

(2) INFORMATION FOR SEQ ID NO: 923:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 554 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 923:

	TCAACTTGTG AAGAAAATTT ATTAAC TT TA GTAAC TCTTC CAACAAAACC TTGTGATGTC	60
35	ATCACAGCCA TATTTGAAGT TATACCTGAT TTAGATCCCT TATCAATTAC AATTGTATTTC	120
	ATCCACTGAT CCGGATTTCT TGCCAAAACC GTAGTAGAAA TAGGATCAAA TTTTGAAATA	180
40	TCTTTTAAAT CAAGCTCTTT TTTTAATTTT TCATTTTCCG CTTCTAATTG TTGGTTCTTA	240
	GATTCTAACT GGCTAATCTT ATTTT TAGAT TCTTTAGAAT CTCCTTTTTT AAAAAAGTCC	300
	CCAATCGTAC CAGCAACAAA ATTAAC TGGTA TAACTCACAA CTCGTTGTCC AAAAGACACA	360
45	GAATCACCTA TATATTGTTT AGGAGGTGAT TGAGATTGTG AACGTATGGA CAGCCCAATT	420
	AATGCAATAA AAACGATAAT TGCACATAAA ACAACAATTA ATTTGGTATT TTTAAAAAAC	480
	TTAAGCACCC AGAACACCTC TATTATGTCA nAATATTGTA TATCCTTTTC TAATTnATAT	540
50	TACTCCCAT T ATGA	554

(2) INFORMATION FOR SEQ ID NO: 924:

55

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 575 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924:

	ATCTTTAGGC ATTAAGCAAG TTTATGTAGA AGACTTTGAA CATAAATCCT TTAGCAAAGC	60
10	TAAAAAAGCC TTAGAAGAAA AAGGGTTTAA AGTTGAAAGT AAGGAAGAGT ATAGTGACnA	120
	TATTGATGAG GGTGATGTGA TTTCTCAATC TCCTAAAGGA AAATCAGTAG ATGAGGGGTC	180
	AACGATTTCA TTTGTTGTTT CTAAAGGTAA AAAAAAGTGAC TCATCAGATG TCAAAACGAC	240
15	AACTGAATCG GTAGATGTAC CATACTACTGG TAAAAATGAT AAGTCACAAA AAGTTAAAGT	300
	TTATATTAAA GATAAAGATA ATGACGGTTC AACTGAAAAA GGTAGTTTCG ATATTACTAG	360
	TGATCAACGT ATAGACATTC CTTTAAGAAT TGAAAAAGGA AAAACAGCAA GTTATATTGT	420
20	TAAAGTTGAC GGTAAACTG TAGCTGAAAA AGAAGTCAGC TATGATGATG TATAAATATA	480
	ATTGAAGTAA ATGTACCGAG GTTCTATTTT GGAAGTCTCG GTATTTTAT GTTGGAGATT	540
25	GCGGTAGTTT TAAAATGCnT CnTGTCnTCA TATAC	575

(2) INFORMATION FOR SEQ ID NO: 925:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 307 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925:

	AAAAACGCTG CTGAGTTTAA AAAGCAACAA TTAAATGAAC AAGGTATTTT CAAGAAACCA	60
40	GTGATTACAC CTATTAAACC ATATAAAAAT TTCTATCCAG CTGAAGACTA CCATCAAGAT	120
	TATnACAAAA AGAACCCCGG TACATTATTA CCAATATCAC CGTGGGTCAG GTAGAAAAnc	180
	GTTTATAGAT CnCATTGGGG GGATCCAAAG CTTAAAAAGA TAAAAGTGAC TACCAGATAT	240
45	AGATATATTG TTACACAAGA AACGGCACTG GACCACCATT TATGAATGAT ATTGGACCAT	300
	TTGCTAA	307

(2) INFORMATION FOR SEQ ID NO: 926:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926:

5 CTCTACGCAC TCATTcAGAT ACACACATTG CGCATTGCTC ATAGAATCAG GTGTACACAT 60  
 TAAAGAAATA CAAGAAcGAT TACGGCATAA AGATATCAAT ACCACTATGA ATATCTATGC 120  
 TAAAATCACA AATTCATACA AAAAAGACGC CTCCCATAAG TTTAGTCACC AAATGGAAGA 180  
 10 CGTCTCGTAA TTAAAATATA TTTGCGTGCA TTCTAATTTA TACTTAGAAT GAATCATACT 240  
 CGTGCATAAT GTAATTTTCT AGTTAGTCAA AACTATAAAC AGTTTTACAT CATTCCTGGC 300  
 ATGCCACCCA TGTTAGGTTG GTCATTATTT TTTTCTGGAA TTGATGCTAC AACCGCTTCA 360  
 15 GTCGTTAAGG ACATTGCTGC AACACTTGCA GCAGTTGnAA 400

## (2) INFORMATION FOR SEQ ID NO: 927:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 809 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927:

TTTAGGTGGT TTTAATnGTT ATGGTCATTC TGGACACCTA CTTATAATAA AATTTCAAAT 60  
 30 CAAACTGAAC nTTTTGTACC GTTTGATTAA ACTCAAATTT ATTAGCTCCG TATTTAAATT 120  
 TTGGTTGGGC TATATTcGTT TCGGTACTTA TTTCAACACC GTTTTTATAA ACTCGGAAGC 180  
 TATCATAAAC AATTcTGCTT CCAGCTTTTA GTTTGATCCC TTCGATTTTC ATTATTTcAG 240  
 35 CATGCGTTAA ATTCCATACA AACGATTCTG TATCTTCGCC TAAAATAATT GTTATCTTTT 300  
 TATACATGTT GAATTGGTCG TTAGGAGCAC TACCATGATA GTAAACTGTA CCTTTGCTCA 360  
 AATTTTCAAA TGTATACTTT CTTTGTCTC CGCCTGCATG CCAATCAATA TTAAAATCAA 420  
 40 ACGACCACAA TCCAACCTTT TTGTTTTCTT CTAActCTAG GCTTGTTCCA ATACTTTCAC 480  
 CGTATGGTAA TTCTGTAGTT TCGAATTTTA GTTCAAAAGA AACTTTATTA CCTTTTTGTT 540  
 TAGGGTTTAT AACTCCGTTA AAAATAACTT TATACTGTTT ACCATTTACA TAAATTTGTT 600  
 45 GATCGTGTCT TGAATATTCG TAATCCGGA AGTTGTTTTT ATCTAATTTc ACGTAATCAT 660  
 CAGAAGTTGG TTGAGTAAAC CTGTAATTCA ACTCTTCTTT TCTTCTGATn TCTCGCAAAT 720  
 50 ACATAGGTTTc TATGTCTGTC GTTAACGAAT ACAACATATC TCGCATATAA GCAATGTCTG 780  
 AACGATTTTTT AACTTTACAA AAACAAGGA 809

## (2) INFORMATION FOR SEQ ID NO: 928:

(A) LENGTH: 1016 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928:

10 nAAAACTATT ATCGCATCTA CaGTaATCGC TGCAGGTCTT TTAActCAAA CTAATGATGC 60  
 TAAAGCTTTC TTTAGTTATG AATGGAAAGG TTTAGAAATC GCAAAAAATT TAGCAGATCA 120  
 AGCTAAAAAG GACGATGAAC GTATTGATAA GTTAATGAAA GAGTCTGATA AAAATCTAAC 180  
 15 TCCTTACAAA GCTGAAACTG TTAATGATCT GTACCTTATT GTTAAAAAAT TAAGcCAAGG 240  
 TGATGTGAAG AAAGCAGTTG TCAGAAATTA AGATGGTGGT CCTAGAGATT ACTATACTTT 300  
 TGA CTTAACT CGTCCTTTAG AAGAGAACAG AAAAAATATT AAAGTTGTTA AAAACGGTGA 360  
 20 AATCGACTCG ATTACTTGGT ATTAAAAAAC ATACTGAATT AAATAGTTGT ACGCCAAACG 420  
 TTAGAAAACA ATGCTAACGT ATTGGCGTGC TTTTTTATTT TAAGTAACTT CCAATTTATT 480  
 TAGCATCTTT ACGACTGTTT AATAAAGCAC GTATGATTAA CACGGTTGCC ACTATATCCG 540  
 25 TTACAATTTT TATGATTGTT AATACATTCG ATTTCTTTT CACAATAGCC ACCTCGCTTG 600  
 TTCAAAACAT AAACAACATAT TGCATTCACT TTTAAGTAAT TATTTATATT ATTTATCCCA 660  
 30 ATAAGCTCAC CATTCAAATA AACACAATAT TATAAAATAA TTATACCTTT GGATATAGCA 720  
 AAAAGCCACA CTCTATAGCA TGGCTTCTAT CAATTATTTT AAAGTATTAT ATTTTAAAAC 780  
 TAGATCGATT TGTCTTTGTA ATTTTTTCTT TTCATAACTG TGTGGGAAAT GAATTAAATT 840  
 35 AACAGCTCTT TGTGCTTTAC GGTGTGTTGC AACAGTTCTT GTACGTTTGA AAAAGTTTAC 900  
 AGCTTTTTTGT GCATCCACAA CTTTTttATT TACTTGwTTT kTAAAGTTTG TTGATACTGA 960  
 TCATATTTTT TAGCAGCTTC ACCGTTnTTA GTTGTGCATG AGATCACCGG CAACCG 1016

40

## (2) INFORMATION FOR SEQ ID NO: 929:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929:

50

AAATGAAATC ATACCTAAAA GAGATATTAT TACAGAATCA ATGATTTGTG ACTGTATTCA 60  
 AAATGCAGGT ATTGATTTAG AAGTATTTAA AGACGACTTA CAAAAAAGTA AACTAACCGA 120

55

CGTTTTCTTT AGTGAAGATG TTCATGAAGA AGGTTTAAAA GTCGAAGGAT TATACCCATA 240  
 TCACATCTAT ACTTATATAA TTAATGAATT GATGGGTAAA CCTATCGAAA AGAATCTTCC 300  
 5 TCCTAAATTA GAAACTTATA TACAGCAACA ACAACTTGTA ACGATGGAAG AATTACTTAC 360  
 TATTTATGAA TGGCCAGAAA AACTTTTAAA CAAAGAGTTA 400

(2) INFORMATION FOR SEQ ID NO: 930:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930:

20 TATTTCTGAC ATGTATCATG CTCCTTCGTG CTTTATTCTA ATGTAATATA CACAATTATA 60  
 CATTGAAATT CAAATTTGTG AACACATTGT GAACTGACAT AAATTATACA CAATTTTATA 120  
 GCGCATAATG TTTTAAAAAT ACACATTATA GCAATTATAA TTAAGTTCAT TGTGTTGTCA 180  
 25 TCAAAAAAAG AAAAAGGTGA TGTTTTAAAT GGATACAGTT GAATCAGTCG GTTTTTGACA 240  
 GCATGACTTA GCAGTTCATA TCATTTTGCA ACGATGGTGT GGTATGCTTA ATGTCGCAAT 300  
 TCAGATTTTA GGATCGCAAA ATGACTCATA TATAGCATGC CAAGTGGCAA GTATCATACG 360  
 30 ACATGGnGTG TCAGGCATAn GGCTCATACT GTGCAATATG 400

(2) INFORMATION FOR SEQ ID NO: 931:

- (i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931:

CCAATCAATG TTGCCAATGG ATCACCTAAT GACAACCAAG TAATTGCTAC CATAGTAACT 60  
 45 GCTGTTTTAA TTTTACCTAA TTGACCAGCT GCACTTACGA ATCCTTGTTT AATTGTAGT 120  
 AAACGTAAAC CAGTTACGGC AAATTcTCTG GCAATaATAA TGATTGCTAC TACAGAATTT 180  
 GTTAGTCCTA GTTGCACAAG TACAATTAAA GCACTTGCAA CTAATAATTT ATCCGCTAAT 240  
 50 GGATCCAAAA ATTTCCCAT ATTTGTAAT AAATTCCATT TTCTAGCTAA ATAACCATCA 300  
 ACAAATCGC TAAGGGAAGC CAATATAAAA ATAAAACCAC TGATTAATAA CTCAATTCTT 360



ATAAAACTG GTATTAACAC TACTCTAAAA ACCGTAATCT GGTTCGGAAT ATTCATTATA 480  
 CATCCTCATT TCTCACTAAT TTATTTCTGT TAAAAATATT AAAACTAACC ATGATCCATA 540  
 5 ACC 543

## (2) INFORMATION FOR SEQ ID NO: 932:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932:

GATTGCGAAT GAGATTAGTG GGATGATACC GGTAGAATGG GAGCAAGTAT TTACAATAGC 60  
 20 TTATGTAACT GATCAAGCTG GAGAAGTCAT CTTTAATTAT ACTAAACCAG ATAGTGATGA 120  
 ATTAAATTAT TATTCAGmCA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA 180  
 TTCATGGTTT AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGG 240  
 25 GCTTGAACCA TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC 300  
 TTTTGATTAT ATAGATTGGA TAAATACAGA GTTTGATCAA TTGGGCCGTC AAAATTATTA 360  
 TATGTACAAA AAATTTGGGG TTATACCAGA AATGGAATAT 400

## (2) INFORMATION FOR SEQ ID NO: 933:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 759 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933:

ATTTTTACAA AGAAATAGTA GTCTTATATA TCTTAACATT TAATAACTAA ATCAAACATA 60  
 TTTTGAGCCT TTTTTTGAAA ATTAACATTT TAACCTTTTT GATTTTACAA CAAATTATAG 120  
 45 CTACGTATTG AAAATTAAAG CmTTGGtTTA AGTGTGTGT TAAAgyTTT TATGTTTAGA 180  
 TTGTTATATT ACTATGTATT CTAAATTTG TTTAAAAAT TAATGCTTTA AATTGATGTA 240  
 TAATGGGAAT AAGAAATAAA TAAAAACGAC CCGCACGATT AACGTACGGG TCCACTACTA 300  
 50 AAGGGAGTCA AATTTTTTACC TcGTTTGTAT CATGCAGCGT TTTACACATA CTTTAAAGAG 360  
 ATGTTTATTC GTTATCGAAG GTACACCTTT ATTATAACTT ATATCATTTT TATTAAAATA 420

ATAATGATTA TTAAATAGTA ACTAAATACA AAATTACATG GGGTGAATGA TAATGAAACA 540  
 ATACTTAATT ACTGGTGGGA CTGGTATGGT TGGATCTCAA TTAGTTAATG-AAATTAAAAA 600  
 5 ATCAGATTCA CATATCACGA TATTAACGCG ACACGACCAA ATTTCAAATG ATAAGAAAAT 660  
 TTCATATGTC AACTGGGCTA AATCTGGGTG GGAACACAAA GTTCCTCAAA ATATCGATGT 720  
 GGTCAATCAAC TTAGCAGGTG CTACATTGAA TAAACGATG 759

(2) INFORMATION FOR SEQ ID NO: 934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934:

GATCAAGCTG GGGAAGTCAT TTTTAATTAT ACTAAACCAG GTAGTGATGA ATTAAATTAT 60  
 TATTCAGACA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTTAAGAA TTCATGGTTT 120  
 25 AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAACTTTTA AAGAAGAAGA GCTTGAACCA 180  
 TGGACATCAT GCGAATTGTA CTTTACAAGA GATGGCAAAT TGAATGTATC TTTTGATTAT 240  
 ATTGATTGGG TGAATTCAGA ATTTGGACCA ATGGGAAGAG ACCATTATTA TATGTATAAA 300  
 30 AAATTTGGnA TTTGGCCTGA AAAAGAATAT GCCATAAATT GGGTTGnAAA AATAAAGnTT 360  
 ATGTTAAGAG CAAGnTTGAG CTGAACTATA GGGGAGATAA 400

(2) INFORMATION FOR SEQ ID NO: 935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935:

CTGAATATAA TTTTnCAAC TACATCTCGT TTATTAGACA CCGTGCACTG ACTAAGAAAA 60  
 TTTCTCTTGA CTCCATTAGT CCTGACGAAT ACTAACATTT AACTACCTTG CTCATCGATA 120  
 GAAACAACCTT GTAATGTTAA TTTCCCTTAT TTTCTTAGTT TTAATCTATC AGCGATTAAT 180  
 50 TCGATTGCAT CTTTTTCATA AGCAATTGGA TAACTTGAC CGCGGTACAC CTAACGCTCG 240  
 AAATATGATT TnTATCGTC ATAATCTAAA ATATTATnGG CAAATCACA GCAGTTTTCA 300

## (2) INFORMATION FOR SEQ ID NO: 936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 936:

GTTATCATCA TCTTCTGAAG TATCATCTTG CCCATCGACT TGACTTGCAT CAGTTCTCTT 60  
 TAAATCATCA AACTCTGGAC TAGCTAATGT ATTATATAGT GTTTTAGGTA AGTAATAATA 120  
 TTCGTTTAGC ATATCTTCTT TTAAAATATC ATCTACTTGA TACATAATTC TTTGAGCCAG 180  
 ATACATATTA TCTTCAGAAT TTTGATTTTG GAAAAAATTA GGTAAATATA AGAACATATT 240  
 TACTAAAATA TCATCTAAAT CTGAATGTAT AGATGGTATA TCAAAGAAAT CTTGGCTTAA 300  
 AAATGCATGT TCTAAATACA AAAATAATAA ATCTGTATAT TGTGTTTTAG TACGATACAC 360  
 TTTAATTTGA GATTCCGTAT ATGATATACG TGTATCTAAG CGAAGATCAA TTAATTTAGC 420  
 AGTACTTGGG CGCTCAACTT TAATAGAATT TAATACGCGC ATATCTTCTA ATAATTTAAA 480  
 AAGTTGTTGG ATAAAATTTA GGGtGTTTAA AAGTTTTATC TTGtACTACT TCATTTACAA 540  
 TTTGtACATC CaTCATATGA TAACCGTAAG CAGCTAACAT AACATCTGTT TTAAACCAG 600  
 CCATTTGAT ATGGCTTGG 619

## (2) INFORMATION FOR SEQ ID NO: 937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 937:

TAATCCCTTT CATAATGGGC ATCAATATCA TATTAATCAA TCTAAAAAAC TTACAAATGC 60  
 TGACGTTACT ATTGCAATAA TGAGTGGTAA CTTTGTCTATG CGTGGCGAAC CAGCAATCTA 120  
 TAATAAGTTT ACTCGTGCAA AAATGGCATT ATCAACAGCT GATTTAGTTA TCGAACTACC 180  
 AGCAACTGCC AGTTTATCAT CTGGcGATCA TTTTGCCGAA CTAGCAGTTA AAGTCGCnGA 240  
 TTATATGAGT GTCGATACAA TTGCATTTGG TAGTGAAAAT AATGAtATCA AAACATTAAA 300  
 rCmATTAgCA CACAGCATTA ATGaAATTGA mCAATCTGaA TCCTTTTCAC aAAAAGTrAA 360

AAGTCCTAAC AACATACTTG GTATTAGTTA CCTGAAAGCA ATTGCTAAAA ATGCTAAAA 480  
 CATCAATGCA ATTTCTATCA AACGAGAAAA TGCTCAACAT CATGATTCAT TAATTCAACA 540  
 5 CCATCAGTTT GCAAGTGGTA CATCTATTAG AACATCAATC ATTAGTCAAG ATGATCATTG 600  
 GCATCATGTG GTACC 615

## (2) INFORMATION FOR SEQ ID NO: 938:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 938:

20 AGAATTGAAG ATGGTAAAGT TTCAAAATAT CATTCCGGTTA TCATAAAAGA CGCACAAGCA 60  
 ACTTCACCAT ATTCAATTTT TATCAGAGGT GCTATTTATC GCTTTGAACC ATTAGTATAA 120  
 ATATACGTAA GTGCTATGAG CGAGAATGCC CATATGAATA ATGACAAGCA CAATGGAAAG 180  
 25 AATCGTAATA TATTATTTAA TCGTGATGCT TAATTAAAT GAAAAAGATT GATAATATAA 240  
 ATGTGAAAAA GTAAGTATAC CCGTAACTA AAGTATTCAC GGTGAGAGGT GTCATGTCA 300  
 TAATGATGCA CGTGTCATAA TTATAATAGC TTAAATATGT CCATACAACA CCATGTAGAT 360  
 30 ATGCATATAC AGGGTATGAT AGACATAGnG TCTGnGAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 939:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939:

GTACAGGTAT GATTGGTGAT CCCATCAGGT AAATCAGAAG AACGTGTGCT ACAAACAGAA 60  
 45 GAACAAGTAG ATAAAAATAT CGAAGGTATT AGTAAGCAAA TGCACAATAT TTTTGAATTT 120  
 GGAACAGACC ATGGTGCACT GCTTGTTAAT AATAGAGACT GGTTAGGACA AATCTCATTA 180  
 ATTAGTTTTT TACGTGACTA TGGTAAACAC GTCGGCGTTA ATTACATGTT AGGTAAAGAT 240  
 50 TCAATCCAAA GTCGTTTAGA ACATGGTATT TCATATACAG AATTCACATA CACGATTTTA 300  
 CAAGCTATTG ATCTCGGTCA TTTGAATAGA GAATTGAATT GTAAGATTCA AGTAGGTGGA 360

GTAGATAAGC AAATGATTAA TAGTTGAGGG GTATGTCGAT GAAGCG

466

(2) INFORMATION FOR SEQ ID NO: 940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940:

ATGAATCACC	CATTGATACC	AATCATTTAC	ATCACTGTCA	TACGAACATA	TATTTAAATA	60
GAAAAAAATT	ATTTTAAAGA	TTATAACTAC	TCTTAATCAT	TTTAGTGAAT	TAAAAAAGT	120
AGTGCAAAAA	GCAAAATATA	CTTTATACAC	TACAAATCAT	TTATTTATAA	TAAAGTTTCA	180
CCAAAAAATG	TTCCAATAA	TGAAACCGCT	TGTTCAAGCAG	TATGATTATn	ACTGTCAATC	240
AATGGATTTA	CTTCAACTAA	ATCCATTGAG	GAAATTAAAT	GTGATTGATG	CAGTAATTCC	300
AATGCnAAAT	GGCTTTCTCT	ATnACTAAG				329

(2) INFORMATION FOR SEQ ID NO: 941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 941:

CGATATAGTA	CCAATTTATT	TGAAGAAAAA	TCCGAAGTTC	AAATTTCCGA	TGAAGCAAGA	60
TATACCGGTT	ATTATGATTG	GACCAGGTAC	TGGAATTGCT	CCTTTTAGAG	CATATTTACA	120
AGAACGTGAA	GAACTTGGTA	TGACTGGAAA	AACATGGTTG	TTCTTTGGTG	ATCAACACCG	180
TAGTTCTGAC	TTTTTATATG	AAGAAGAAAT	AGAAGAATGG	CnTGAAAATG	GAAACTAACA	240
CGCGTAGATT	AGCATTTCCA	AGAGnCCAGA	CACAAGATAT	GACAGCCnCG	ATATGGAGAA	300
GTAACGTTCC	ATGAT					315

(2) INFORMATION FOR SEQ ID NO: 942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 699 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 942:

5 TACCAATAAT CAACTTGTTT TACATCATCG TGTGTTTCAA TCACTTTCCT TTTTATACCT 60  
 TTCTTACCTT TAAAGAATGC ATCAACATCT TTTATTGAAG ATCCTTTTGA ATCTTTAGTA 120  
 AATCTATAAT CTGCAAGTTC CACTTTACCC ATTAATTCTT TGTAATCTTT CCATCCTTGA 180  
 ATCCCTTTAC TATTCGTAAA CGACTTTTCT GTCATTAATG GATCCCACTT ATCAAGAGAT 240  
 10 GGCGCATCTT TAATTCCTTT CATTTTCTTC TCTATTCTT CATATTCTC TAAATCTGGA 300  
 TCTTTCTCTT CTTCCGATTC TTTTITTACA GTTCTTGTT TTGATTCTTC TGATTTCCTT 360  
 GATGATAATT TATGATTCCC ACCAAAAGAA CAACCTGCTA CGACTAAAAG CATAATTAAA 420  
 15 AGTAAACATC CCAGTGTCTT TTTTATAAAC TTTCTCCTCT TAAGTTATTT TGTTTGAATC 480  
 AAATAACAT ACATAAATTT AAAAACTTA TTTATATTGa TATTTTACAT TAACCATCAA 540  
 20 TATTTTAAA TACTTTAAWT GaTAATTTAA GAAAATTGTT TTGTCTAATA ATTTAAGTAG 600  
 TTAAACATA GATAGATATA AAATAGTTTA TAGCCATTAA TTTATAAGTT TAAAATTCGC 660  
 ACTATTTCAA TTTGCCATTT AAAAATAGTT TGTTTAATC 699

## (2) INFORMATION FOR SEQ ID NO: 943:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 943:

35 CGCTCCATAA ATCAACAATG TTCGAGTCTG TAATCTAGAT GATAAAACGC CAAGAATGAT 60  
 CATAAATGGC ACTTCTAAAc CAGCACATAA ACTAGCTAAA TAACCGACAT GTTGTTTCATT 120  
 40 TTCTTTTAAA TAATCAGTAA CAAATAAAGG CATATTCATC GTATACATCC ATTGTCCAAT 180  
 GTGTAATAAA ATAAATGCAA TAAATGGTAA TAAAAGCGTT TTGTCTTTAA ACATATTAGG 240  
 AGCAATTTTT TCAACATGTT GTTGCGTACT AATAGGGTGT TTAATGTTTA AATCCTTATA 300  
 45 GAnAAACACT TGAAGTACTA AAGTAAATAA AATGATACTT ATTGGGCCAC CAAACAATCC 360  
 AGCATAGCCT TTTAATCCGA TTAATTGGGC ACCAATAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 944:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 944:

5 AAGATGACAA TACTTTGTTT CAAGAATTGA AAAAAGAATT AGAACAATGG GATTTTAATG 60  
 TTGCTGGTAT TGAAGATTTC GGCAAAGTAA TGGATACATT TGAAAGTTTT AATCCTGAAA 120  
 TTGTTATATT GGATGTTCAA TTACCTA~~m~~AT ATGATGGGTT TTATTGGTGC AGAAAAATGA 180  
 10 GAGAAGTTTC CAACGTACCA ATATTATTTT TATCATCTCG TGATAATCCA ATGGATCAAG 240  
 TGATGAGTAT GGA~~A~~CTTGGC GCAGATGATT ATATGCAAAA ACCGTTCTAT ACCAATGTAT 300  
 TAATTGCTAA ATTACAAGCG ATTTATCGTC GTGTCTATGA GTTTACAGCT GAAGAAAAAC 360  
 15 GTACATTGAC TTGGCAAGAT GCTGTCGTTG ATCTATCAAA AGATAGTATA CAAAAAGGTG 420  
 ATCAGACGAT TTTCTGTCC AAAACAGAAA TGATTATATT AGAAATTCTT ATTACCAAAA 480  
 20 AAAATCAAAT CGTTTCGAGA GATACAATTA TCACTGCATT ATGGGATGAT GAAGCATTTG 540  
 TTAGTGATAA TACGTTAACA GTAAATGTGA 570

## (2) INFORMATION FOR SEQ ID NO: 945:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 945:

CCGAGnCCAC CGTTCCAAAG TCCATTTTTA TCCCCATCCC TCTCTGAATT GAACTATAAT 60  
 35 TTTTGAATTT ATTAATAATG CTATTTTnT TATTTTATCA AAAACTGATT ACAAATACAC 120  
 ATAGAAAATG AAATATATTT TTCTTTGACT ATACATAACT GTTATTTCTT TGGATATTTA 180  
 40 TATTAAATGC ATTGGTAGTA GTTGTAGCGC ATTAATGTTT GACGGTGTAT AGTATTAATT 240  
 ATATTGAAAG TTAGTTGGAA GTTGATAGTA GGAGTGGGAG CATTGAAGCG ATTTGTGGCG 300  
 ACGGTATTAT TATTACTAGT CTTTATATCA GGaTGtGGTA ATGrTaAATA TGTGAAAGAA 360  
 45 ATaGATGAAG CAGTTAAAaT TCAAAATCaA AAACAAGAAC ACTTGCCCAA AAAAGGCAAC 420  
 GGTGATCGTG TTGATCATTT TGAACGCAAA GATGCTAATA TTTATGTCTA TGATAAGGAT 480  
 AAAATTATCA TTTTAGCTTA TAAACCTTTG AGTAATGATG ATGAAGTGCA TTATTATGCA 540  
 50 TATGATTTTA GTGATAAACG TGTATCATAT AAGCAAGATT TTGATTCGAG ACGATATTAT 600  
 CAACAACATG ATGCGGATTA TCATGAAGAA AATATGACGA ACTAGATATG AATAGGAGTT 660

GGTAAAAAAG AATCAGCAAC GACATCTTCG AAAAACGGCA AACCATTAGT TGTCGTATAT 780  
 GGCGACTATA AATGTCCTTA TTGTAAAGAA TTAGATGAAA AAGTCATGCC AAAGTTGCGT 840  
 5 AAAAATTATA TAGATAATCA CAAAGTGGAA TACCAATTTG TCAATTTAGC TTTCTTAGGT 900  
 AAAGACTCAA TTGTTGGTTC GCGTGCGAGT CATGCAGTAT TGATGTATGC ACCTAAATCA 960  
 TTTTGTAGATT TTCAAAAGCA ATTATTTGCT GCCCAGCAAG ATGAAAATAA AGAATGGTTA 1020  
 10 ACAAAAGAAC TATTAGATAA ACATATTAAA CAACTGCATT TAGATAAAGA GACGGAAAAT 1080  
 AAAATTATAA AAGATTACAA GACAAAAGAT AGCAAGTCTT GGAAAGCTGC AGAGAAAGAT 1140  
 15 AAAAAAATAG CGAAAGATAA TCATATAAa aCGACACCAA CTGCATTTAT TAATGGCGAG 1200  
 AAAGTTGAGA TCCATATGAT TATGAAAGTT ATGAGAAGTT A 1241

## (2) INFORMATION FOR SEQ ID NO: 946:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1057 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 946:

TAATACAATG ACACCATTTA GCATGACCGT TATCCCTGTA ATTCACTGA TATTATCTGT 60  
 30 TGCAATTTTA TGTGACGAAC TGTTGCACTT AATTTGATAA ATCAACAAAT ACAAAAAATC 120  
 TAAGTTGAAC AATTATGATA CAACCGTGCA AACGATATGT AGTATAACTT GTCAACTTAG 180  
 ACTTATTGAT AAATATATTA ATAGTGGTTT ACCATAGCAG GAGATTTTAC aTCAAAAATT 240  
 35 TGAAGTAGCG TATCaATCTT TGaATCaTCa ATATATACCT TATGTAAATT TTTCaTATAC 300  
 ATCGAATGAG AAAGTGCTTC aTAATTTAAT GAAAAAGATA TATGATCTCC AACTTGATAG 360  
 40 TGTCCTTGAC CATTTAAATC AAGCATTAAA TGATCACTCG AAGCGCCTAA AATATTGATA 420  
 TGCTGATCCA TAGGTGAAAT ATTATCGACT TTTGTaYCTA AATAACCAAT ATCTACAATA 480  
 GCTTGTAAGA ATGATTCATG CGTTTGTGTA TTAACCTCGAG GTTTAATTTT TAAAATCTCA 540  
 45 GCCTCCAATG TAATCGCATC TTGATATAAC ATAGCGATCG CTTGATTTGT CGTTGTATCA 600  
 ACACCTCTAA ACAACGTTTC ACCTATTCGC AATTCATTTA TTTTACCCAA ATCATTATAT 660  
 AAAAGTTGTG GTAACATGCT CGAATTACCA CCTGAAATAA TTTTCAATCG ATATCCTATT 720  
 50 TCTCTTTCAA CAGCTGAGAC GAATCGATTA ATCATAAAGA TATCATCATC ACTTGGCGCA 780  
 TCAGATTTAA AACACATAAA ATTGAATGCT AAACCTACAA AATGGATATT TTTCAAGTGA 840



CAATCTACCA TTAATAAAAT CTTATGTTTT TTCCTAAAA CTTCTGgCTA CTTCAATTTAT 960  
 TTGATGTATG GGTAGATAAT TCCGGTTTGG GATACCTCCA TATCnAACCT TTTTTCCTAA 1020  
 5 TCAATATCCT GGAAAAAnCCC TTTTTTTGGG CAGGGCG 1057

## (2) INFORMATION FOR SEQ ID NO: 947:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 649 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 947:

GATATCCGCT CGATGAATAT ACCTTTAAAG GTGTTGGTGC AAATTCTGAA CAATTAAGTG 60  
 20 CTATGAATCA TGATTCTTTA AAAAAGGAGT ACATTTCAAA TGA CTGTAA ATATAATCAA 120  
 AATGGCGAAT TAACAATGGA TGGTATTAGT TAAAAACGA TTGCACAAAG CTTTGGTACA 180  
 CCTACCATTG TTTATGATGA ACTACAAATT aGAGAACAGA TCGCGCGTTA CCATCGCGCA 240  
 25 TTTAAAGATA GTGGATTAAA ATACAATATT TCATACGCCT CAAAGGCATT TACTTGCATT 300  
 CAAATGGTCA AACTTGTAGC TGAGGAAGAT TTACAGTTAG ATGTTGTTTC TGAAGGTGAA 360  
 TTATATACAG CTTTAGAAGC AGGTTTTGAA CCGAGTCGCA TCCATTTCCA TGGTAACAAT 420  
 30 AAAACGAAAC ATGAAATTAG GTATGCTTTA GAATAATA TCGGTTATTT TGTTATAGAT 480  
 TCATTAGAAG AAATTGAATT rATAGACCGC TATGCTrATG ATACGGTTCA AGTTGTATtA 540  
 CcGAGTTAAT CCcAGGTGgT TGrAAGCcAC mTrCaCaCgA aTTTATTCaA ACyGGGcaaG 600  
 35 AAgGATAGGT TAAAGTTTTG GGATTAAAnCC nnTTTCCCAT TAATGGGCC 649

## (2) INFORMATION FOR SEQ ID NO: 948:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 948:

TACAAAGCTT AAAACAGAG CTTAGTyTCG TTGAACCATT AATTAGCCGC TTAGAATTAG 60  
 50 AAGAAGCTAA TGATAAACTA GCTAATATCA ATGATAAGTT AGATGACATG TATGATTTAA 120  
 TTGAACATGA AGTTAAAGCT AAAAATGATG TCGAAGAAAC AAAAGATATC aTTACGGATA 180

AAACTACTA TATAAATGAA TCTGATGCTC AGAGTGTTTCG TCAATTTGaa AATGrAATTC 300  
 aAAGTTTAAT TTCTGTATAT GATGATATTT TAAAAGAnAT GTCTAAATCT GCTGTGCGAT 360  
 5 ATAGCGAGGT TCAGGATAAT TTACAATATT TAGAAGATCA TGTCACAGTT ATTAATGACC 420  
 AACAAGAAAA GCTACAAAAT CATCTGATTC AATTGCGTGA AGATGnGCAG AA 472

## (2) INFORMATION FOR SEQ ID NO: 949:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 949:

AGAGGATCCC AGGCGTTTGT TGATCCAGCA GCCGATnCAG AATACATCTT CTATGCATAT 60  
 AAACGTTTCA ATTTCGAATT GAAAGATCCA AACTTCACTA GTGAAGAAAA TATGTTTAAA 120  
 GATGTATCAG ACAAACCATT AATACCTGCT CGTAAAGCTC AAATTACAAA TGCGAACATAT 180  
 25 AAACGACATG GTATGAAGTT GATGATTCTT GGAATGACG AACCATATAA CAATGAGTTC 240  
 AAGAAAGATG ATCGAAAAATG CGAAGAATGA GAAATTTCAA AGGTGCGCAn GTCAAGCCAT 300  
 GTGTCAGGGG GGCATATGAT TTCnGGTCAT CAGTAAGGAC TGTGTCATGC CATGGCCATC 360  
 30 TGTGTGTAChG ATCTCTAATA GAATCTCAGA TGCCCGGCAA 400

## (2) INFORMATION FOR SEQ ID NO: 950:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 556 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 950:

AAAATCTTCG ATGACAAAGA AATCTAATGA TGTTTCTTTA AAATGACCAA ACTGCAACGG 60  
 45 AATGATATAA CCACACTTGA GATATGGCGC TTCTTTTTTC AACTTAGTCA TCACATCATA 120  
 ATCCAAAGAC ATCACACGAT ATTGATGTTT AACACCATGC TTTTTCAAAA TATCAATAAC 180  
 ACGTTGTGTA TAATCTGCTG GTTCTTTACC ATGTGGCTTT AACTCTACTA GTAGCTTCAC 240  
 50 ATTTGATTGT TTAGCCGTTT CAATAAATTC GTCTAAGGAT ACAAATTTTG CTTTCATGTCC 300  
 ATTTTGACGC ATTTTCAAAC CGACGATATC TTTGAAATTA GATTCAGAAA TATTTTTATT 360

CATAATTGTA TCTAACTCAA CGTATTCGAC ATTCGCTTTT GCAGCAGCTT TCAATGACGG 480  
 AATAGAATTT TCAACACCTT TATCTTCGAA ACCACGTGGC CAATAATGGA GATATTGTAA 540  
 5 TTGATAGTAT TATTGG 556

## (2) INFORMATION FOR SEQ ID NO: 951:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 951:

TTGTGGTAAT GATGTTAATC AGTATATTTT TACTTTTGAC AATGACATCT AAAGGATTAA 60  
 20 GCAATCTTAG AGTAATAGAT GATGAGGCAA ATATCATTTT TTTTATTACT GAATTGAATT 120  
 ATATTAAGTC GCAAGCTATA GCAAATCAAG GATATATCAA TGTTAGATTT TATGAAAACA 180  
 GTGACACTAT TAAAGTAATA GAGAATAATA AAATACGATT TCTAAAATTA AAAGTAGGCA 240  
 25 AAATAATTAA TGTTGCAAAA GTTGATATTA TTGCCTTTGA TAAAAAGGG AATATCAATA 300  
 AATTTGGTAG CATAACAATT TACAATAACA ATTCAATTTA TAGgAATAAT ATTCCATATT 360  
 GaaaaAGGcA AGAATTCGTT ATGAAAAGCT ATAAGTGTA AGGTTCATTC TTAATAGATA 420  
 30 GTATGGCTGG nTTTTTGCCA ATTGGGATTG nATTACATTA CTATTGATT 469

## (2) INFORMATION FOR SEQ ID NO: 952:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 730 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 952:

ACATnTATAA TnCTTATTTG CTTGCTCCTT TCACTTTTTTA AGAGTAAAA n ATAACCTGAA 60  
 45 ACATAACTTT AACATCCAAG TTTCAGGTTA GTGTAATGTA AATGATTTAC TTTGTTnTAT 120  
 TATGATTAAA CATCTAATTC TCTGCTTGTA AGTGCTTTAA TCATCTCTGG ATCAGCATGT 180  
 GAGAAAAATT GGCTATTACT TTCTTCTAAT GTCGCAATTT GTTGTTTATC TTCTTCTGTA 240  
 50 AGTTCAAAAT CAAATATATC TAAGTTTTGA GCCATACGTT CTGGATTTAC TGATTTTGCG 300  
 AGTACAACAA TGTCACGTTT TACTAACCAG CGTAAATAA CTTGTGCAAT TGATTTGTTG 360

AATGGTGCCC AAGCTTCTAC CACAACATTT TCTTGTTGAA GTGCTGCAAC TTGTTCTTCT 480  
 TGTTGATGGA ATGGATTAAT TTCTATTTGG TTCACTTGTG GTTGAATTTG ATTGTGAATA 540  
 5 CCTAAATCTA CAATTCGATC AACGCCGAAG TTAGATACAC CGATTGCTTT AAaTTTTACC 600  
 ATTTTCtTTT AACTCCTCCA ATGCAcGCCC ATGGAGCCAT ATACnGCCAT TGGTAAAGGT 660  
 TGGGTGGAAT nAAGCACCTA GGATCCAGGA TAGGTCCCAA ATTTTAATCC GGTGGGnAAT 720  
 10 GGATCGGTTC 730

## (2) INFORMATION FOR SEQ ID NO: 953:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 953:

ACAAATGACA ACGTACAATG ACGTCTTCAC AAACATGCAT TTTAGGAGAT TGATTATTAC 60  
 25 AAATATCCAG TTTTTTGTTA CATCTATTTG CAAATCTGCA CTTATTAACG TGAAATGCTT 120  
 GGATTGATGG CACAATTCCT TCTATCGTTT CAAGTCGTTT CTGCTCTTCT TTAAGTTTTG 180  
 GAATTGTTGA TAATAATTTT TGGGTATAAG GATGTTTCGG ATTGTGTAGT ATTTCTTTTA 240  
 30 TGCCTCCAAA TTCTACAATT TGACCTGCAT ACATAACTAA GACTTTATCG CAAAACCTCAG 300  
 CAACTACACT CAAATCATGT GTAATCATCA TAATTGCCAT TTGCGTTTCC TTTTGCAATT 360  
 CTTTTAATAA GTCTAATATT TGCGCTTGAA TCGTGACATC 400

## (2) INFORMATION FOR SEQ ID NO: 954:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 954:

TAAATCTTGA GGACGTTTGG TCTGAAAGCG ATGCTCAACT GTTGATAAAT CCAATTCGAT 60  
 AACATCTGTA TAATTAGGAT CTTCTTTCTC AACATCAAAa ACATATGGTT TTGTTTCAAA 120  
 50 TATTCTTTTA CTAGCGCGAT ATGTTCTGCT GATCTACCAG TTAAC TTCAT ATATTTAAGA 180  
 ATTCTCATCA ACTGGGGAAG AATCCGCAAG TTGCTCCATA CTCTGGTGCC ATGTTTnCAA 240

## (2) INFORMATION FOR SEQ ID NO: 955:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 955:

AAACATTTAC ACAAGTAGTA GAAGCAATTT ATGATGAAGA AGGTAACAGC TTaGamgCGG 60  
 CGCGCCATCC aTTACAAATC GTTCAAATTA AAGTGGATCG CCCGATATAT CCAAACAACA 120  
 TGATGAGAAA GGAAATTGGC TAATGAAAGC TACTACAATC ATTGGCATAG CTGGTGGATC 180  
 TGGCTCAGGA AAAACAACCTG TAACTAACGA AATTATGAAA AACTTAGAAG GTCATAGTGT 240  
 CGCTTTACTT GcTCAAGATT ACTATTATAA AGATCAAAAG CACTTGACTT TCGACGAGCG 300  
 CCTAGAAACC AATTATGACC ATCCATTTGC ATTCGATAAT GATTTATTAA TTGAAAATCT 360  
 TAAAGACTTG AAAAATGGTA AAGCAGTAGA AGTACCGACA TATGATTATG CtAGTCATAC 420  
 AAGAAGTGgA CATTACCATT GGATTTTtAA ACCTAAAGAT GtTTATTTAT CGTAGAAGGG 480  
 CCTTTTTTCGC CTTTAGGAAA ATAAGGGTAT TTAC 514

## (2) INFORMATION FOR SEQ ID NO: 956:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 956:

ATTTTAACGA ATATCTTGCC GTACGATGCC CAAGCTGCAT CTGAAAAGGA TACTGAAATT 60  
 ACAAAGAGA TATTATCTAA GCAAGATTTA TTAGACAAAG TTGACAAGGC AATTCGTCAA 120  
 ATTGAGCAAT TAAAACAGTT ATCGGCTTCA TCTAAAGAAC ATTATAAAGC ACAACTAAAT 180  
 GAAGCGAAAA CAGCATCGCA AATAGATGAA ATCATAAAAC GAGCTAATGA GTTGGATAGC 240  
 AAGCCATAAA GTCTCACCTG AATGACGGTC AAGTGTATAG CATAATAGTC ATGCTAAGTT 300  
 AATGAGTCTC AATGTGTAGG GCACAAGTGC GGGCGTCTAT GCATGAATGT TGCCACGCTC 360  
 ACAACTGGGA AGTGTAATG TGA CTGTA 388

## (2) INFORMATION FOR SEQ ID NO: 957:

- (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 957:

10 AACAAAGTAC ATCGCAGTTA CGAGAAGAAA TAAATGCATT GTATAATCAA GTTATAGAGG 60  
 TTGGACAAGC GTTATCAAAG CAGCGTCGTA TAGTCGCTAG GGAGTTAAGw GACCACATTG 120  
 TATCGGAAAT TCAAACTTA CAAATGAAAG ACGCAAATCT TGAGATTTCA TTTAAAAAAT 180  
 15 TAGAAGAACC GAATATTGAT GGAATCGAAT TTGTAGAATT TTTAATCAGT CCAAATAAAG 240  
 GGAACCAATT AAAAAGTTTA AATAAAATTG CGTCAGGTGG AGAAGTTTCT AGAATTATGT 300  
 TAGCGTTAAA AAGTATTTTT GTTAAATcGa GAGGTCAAAC TGCAATTtTr TTcGATGAGG 360  
 20 TTGaCTCAGG TGTATCtGGr caAGCTGcAC CAnA 394

(2) INFORMATION FOR SEQ ID NO: 958:

- (i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 503 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 958:

CCGCCATTTT TTTCGATTTC TTTTCAAGT TTTTCACGGT CTTTGAAGA TAGACTATTG 60  
 35 AAATCTTTTG CACCACTATC ATCAAATCA ATATCTGCTT TCAATTTTGT GCTAGATTTT 120  
 AAAATGAAAT TAATTGGTTC TTCAGcATAt TTGATGCCGA TATyTAACGT AGATTTCTGA 180  
 GTGTTATTyT TTACGTCAGA ATCTATATTA TTTTCAAAG TGAATTCATT TTCGTCGCTA 240  
 40 TATTTATCTA ATGCGACAGT GATTTTACCT TTATCTTGAC GTTTTGTGCC ATCTACTTTT 300  
 TCTTGATTAT CTAATTTGAT TTTTGATTCA TCATATTCTG TCTTTTACC AAATTCGTAT 360  
 TTATCATTAT ATTTATtATC TTTWTCTTTA GAAGATACGC CTTTAATTGT ATATTTGCT 420  
 45 TCAGCATACG TGTATTTATC TTGATCGAAA TCAAGTGCCT AATCTAGTTT TAACTTATCG 480  
 TCTTCTAAAG TATTAGTACC TTT 503

50 (2) INFORMATION FOR SEQ ID NO: 959:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 959:

TCAAACGTAC AGAGCTTGTT AAGTGTTTAG ATTATTTACG AGAGAGCGAC ACATTAGTTG 60  
 5 TCTATCAACT TGATCGGTTA GGTAGAACGA CAAAACCTATT AATTGAATTA TCACAATGAT 120  
 TCGATGATAA CGGAATTGAC TTACCAATT AGTAACCTGA ACATTTCCAC GAAAGACCCC 180  
 10 ATGGGGCCAA AATGTTTTTA CCGATGATGA GTGCCTTTTT CCGGGTTAGA AGTTAATTTA 240  
 CTATGTGAGT GTATAAAATA GACTnAGCAG CCACAAGnCG AGAGGCCGAA AAAAGCGGGC 300  
 GCCCTCT 307

## (2) INFORMATION FOR SEQ ID NO: 960:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 960:

ATAAGGACAT TTATAGTCGC CATATACGAC AACTAATGGT TTGCCGTTTT TCGAAGATGT 60  
 CGTTGCTGAT TCTTTTTTAC CGCAAGCTGT TAAAATTAAC ATGCTCACTA TAAATAATGT 120  
 30 TAGTAATTTT TAGTCCATAA TTA CTCTCTAA TCCTAACCAn GTCnGCnAAA TTTCCTCCAT 180  
 GATAATCCGC ATCATGTTGT TGATAATATC GTCTCGAATC AAAATCTTGC TTATATGATA 240  
 CACGTTTATC ACTAAAATCA TATGCATAAT AATGCACTTC ATCATCATTA CTCAAAGGTT 300  
 35 TATAAGCTAA AATGATAATT TTATCCTTAT CATAGACATA AATATTAGCA TCTTTGCGTT 360  
 CAAAATGATC AACACGATCA CCGTGCCTTT TTTGGCAAGT 400

## (2) INFORMATION FOR SEQ ID NO: 961:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 961:

ACAATTAGTT ATACCCAAAA GAGTTATGTC AGTGAAGTAG ACAAGCAAAA CTCAAATCT 60  
 GTTAAATGGG GTGTTAAAGC AAACGAATTT GTTACGCCTG ATGGAAAAAA ATCTGCGCAT 120

GCTCCTGATA ATCAATTGCC ACCTTTAGTT CAAAGTGGCT TTAATCCATC GTTTATCACT 240  
 ACACATATCAC ATGAAAAAGG TyCagTGATA CGAGTGaATT TGaAATTTCa TATGGTAAGA 300  
 5 ACTTAGATAT TACCTATGCG ACTTTATTCC CTAGAACTGG TATTTACGCh GGAAGGAAGC 360  
 ATAATGCATT TGGAAATAGG AACCTTGTAh TTAnGTATGG 400

(2) INFORMATION FOR SEQ ID NO: 962:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 962:

20 CTTTTACAAA GACAAATTAG CGGTAATCGG TAAngATCGT TGTTGATCCA GTTGCACTAT 60  
 TGAAAGAATT AGACGGATTA AATGAACGTG GCATTCCTAC AAGTAATTTA CGTATATCTA 120  
 ATCGTGCGCA AGTGATTTTA CCATATCACT TAGCACAAGA TGAATATGAA GAACGTTTAC 180  
 25 TGGTGACAAT AAGATTGGTA CACTAAAAAA GGTATCGGTC CAGCATATGT AGCCAAGTCA 240  
 CGTATCGGTA TCGTATGCAG ATTACTTGAA AAGAACATCG AAGATATTAA ATCAACATGA 300  
 TATAACCAGC TATTCAAGGA TGTTACGAAC ATGhCACATT GATGAAnCTT GAGATATA 358

(2) INFORMATION FOR SEQ ID NO: 963:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 963:

AGTGAGCAGG TTGAAGTAGT AGGGCCGATT CAAATGGAAA GAGATACACA TAAAGATGGT 60  
 AAGGTAAAGT GGCAATTGCT TTATATAATG AATCAGGATG ATGATGAAAT TAAGCCACCA 120  
 45 TTTTTTATTC AATGGGAGGA AAGTGATTCC ATTGCGTACT AAAAAATTGC AAAAATATTT 180  
 TCAAAACCAT TTTCAATTGA AACTGTATTG TGAAAGTAAA ACCGTCACAA CAGTATCGAT 240  
 50 TGGTTGAAnT GGTTGhAT 258

(2) INFORMATION FOR SEQ ID NO: 964:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 388 base pairs  
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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 964:

5	TTATCAAACC GCCATAGCCA CATCTCGATT CAAGGATAAA TTTGTTTTCT CATATCTTAT	60
10	CTCTCATGAC AGTGCACGAT ATATATCTTT TCCAAATATT CATCACTTTT TTCCTGTAA	120
	AATCATTTCT ATTATTAATG CTTAATGAC AACTTATTTA ATTTATTGCA TTTAATGCCC	180
	TGCTTCATTT TCAAATATTA ACTTTAATCG ACTAGCTCAT CACACTATTT ACCCTTTCCA	240
15	CCTATCACTA CTGAATTCAA AACGATTTGT TTACAAATCC CCTTATGCCA ACGGTCGAAT	300
	TTCATCATGT TTACATTTAA TTGCAAATGC CCTCTTGAAA TATTTTAAAA TTAATATTAT	360
20	TCTTAGCATA CTAGTCGGAA TTATATTC	388

(2) INFORMATION FOR SEQ ID NO: 965:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 602 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 965:

30	AAAGTGAGGT ATAGTCCGAC CATACTCTAA AAACGTAGCG AGATAAATAT ATTTCAATCC	60
	TAACTTTTAT GTTTTGAGGC ACTTGCCATT TAGGATATTG TCGTTCGTAA TACGACACTT	120
35	GTTGTATAAA TACACCTAGT CCAAATGGCA GCATCATGAG TAAGATACTT CTAAATAAC	180
	TTAAACCAAT ATCATGCCAT ATGTGTCCAA TAATCAATTG AAAGACAATG ATAGATACTA	240
	TTAAAACGAT TATATTTATT GTCACTTGTT CAAACGCACT CCTTTTCCAA ATAATAGAAT	300
40	TGCTGCTTGC ATGACAACCA TAAAACATAC AAACATAGCA GTTTTAAGCG TTAGACTTTC	360
	TAGAATGTGa TTTAGAACAT GTAAGGGCTC ATTAAAGAAA TAAACGGaAT GTAAGCGTAA	420
45	GAAACGACCA ATATAAATTC CGAATCCATT TAAAACATT AGcACGaCAA CrATTAATCT	480
	ATTaAGCCAA CGGTGaGaAG TCAATGtTAG TATTTCAAAA TAGATThAAA TCATCACATA	540
	AACCGCTAAG AAGACACCAA GCAGTAAATA GGTAAAGTAT TTCCACTCAC TTAAATTTAG	600
50	TC	602

(2) INFORMATION FOR SEQ ID NO: 966:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 744 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 966:

	GTCCTAAGGT AGATTTATCT ACAACTGTTG TTATTTTAnC AATTATTGGA GCGATTTTAT	60
10	TAATGTTTGC TAGCATATAT TTTATnAAAA TTGTGACATC ATACTTTACT AAGAACTTT	120
	TAGAAATTAA ATTTAATTCG AAATAGTATT TTCAATGAAG TGCTTCAAAG CTAAACTTTC	180
	ATGACATTTT TTTGAAACTA GAGAAAATGG CTCATCAACT TCTAGCtGAA TGCCTTCTTG	240
15	AAAATGTATT AATGTTGAAT TCTCTATGGC AGTCATACCA ACAATATAAT GTGCATTGAT	300
	ATAAATTTGT ATCGGTGCAC GTTTATGTTT TAACGGAAAA AGTATAGTTT TTGGGTTGAT	360
	GTAAATAGGA ACCAGTTTAT TAATATTTAG TATGTTTTTT GCAGTCTCAA TTAGCACACT	420
20	TTGTGATGAT AAATGCAATT TCGCATAATA TGzAACGAGT TTGTTAATTG GAACTTTAAG	480
	AATGTAATCG CAATGTAAAA AGACACAATT TGTTTTCGAGA TGGTTTGAAG TAGCAGTTTG	540
	GATATAAAGT AGATATTTAG TAGAATTGTC TTGCAAATAT AGTACTCCTC GTTTAATAAG	600
25	TTGTTAATTT AATGGTTAAA ATAAATTTAT ATGAAGATGT TAGGGTGTTT CAACATCATT	660
	AACACATCGA CCGAAATTTT ACAATAAACT AATTAAAATT ATGTTGGCAT TTACGCTTAA	720
30	CGGACATCTT AATTAATTTA ATCG	744

(2) INFORMATION FOR SEQ ID NO: 967:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 503 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 967:

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	TACTTTGCAG GAGCATTAGG TATTCTAGCA TTTATAATGT CAATTGTATT GATTCACGAT	60
45	CCGAAAAAGT CTACGACAAG TGGTTTCCAA AAGTTAGAGC CACAATTGCT AACGAAAATT	120
	AACTGGAAAG TGTTTATTAC ACCAGTTATT TTAACACTTG TATTATCGTT TGGTTTATCT	180
	GCATTTGAAA CATTGTATTC ACTATACACA GCTGACAAGG TAAATTATTC ACCTAAAGAT	240
50	ATTTTCGATTG CTATTACGGG TGGCGGTATA TTTGGGGCAC TTTTCCmAAT CTATTTCTTC	300
	GATAAATTTA TGAAGTATTT CTCAGAGTTA ACaTTTATAG CyTGGkCaTT AWTATATTCA	360
	GTTGTTGTCy TAAwAwTAWt AgTTTTtGCT AATGGACTAT TGGGTCAATA ATGGTTAATC	420

TTTTCCnAA<sub>n</sub> ATTGCnGGGG AAG

## (2) INFORMATION FOR SEQ ID NO: 968:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 968:

15	TACAGGTAAA AAAGGTGGTC CGTTTATCGA TTCATTAAAC CATCGTAGTT ACACGAAAGC	60
	ATATGTTTCA TCAGAAACCG ATATTCCATT TTATGCTGAA GCATTGGA TTAGAGAAGA	120
	AAATGTTGTA CCAACAGGTG TACCACGTAC TGaTGTACTA TTTGATGAAG CTTATGCAAC	180
20	ACAAATTAAA CAAGAGATGG AAGATGAATT GCCAATTATA AAAGGTAAGA AAGTTATTCT	240
	ATTGCGACCG ACATTTAGAG GTAATGGTCA CGGTACGGCA CATTATCCAT TTTTAAAT	300
	TGATTTTGAA CGTTTAGCAA GATACTGCGA GAAGCATAAT GCAGTTGTGT TATTCmAAAT	360
25	GCATCCGTTT GTAAAAAaT GmCTTAATAT TcaCgTGaAC CATAGACCAT ACCTTAATCC	420
	GATGTGGTCC AGATCCATCC GTGGAAAGTT AAACGGATAT TCCnC	465

## (2) INFORMATION FOR SEQ ID NO: 969:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 969:

40	AATTCGGAAC AACGAGCTGG CAACAACATA AGATGACAGA GGCGAATGGT CAATCAATTC	60
	AAGTTAACTT AAATAATGCG CAAnGCGATT TGGGATATTT AACTGCTGGT AATTACTATG	120
	CAACAAGAGT GCCGGATTTA CCAGTAGCGT TGAAAGTTAT GAGGGTATTT ATCGGTATTC	180
45	GTAAAGATGA TACAACAACn ATTTACTCAC ACCTATACTC TAAAAGATTn CACACGTCAT	240
	CACAACGGCG ACTTGAGCAA CATGGACAGT TCCTAATGAA CATAATCAAC GGTATTGTTC	300

## (2) INFORMATION FOR SEQ ID NO: 970:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

5 ATACGCGAGC GAACGGTGAA GCGACTTGCT GCTGCAAAC GTCTGCGACC TTGAGCAACA 60  
 ACATGAATGG TCTTCGGTTT CCGTGTTCG TAAAGTCTGG AAACGCGGAA GTCAGCGCCC 120  
 TGCACCATTA TGTTCCGGAT CTGCATCGCA GGAATGCTGC TGGATTATCA TCCGATTTTT 180  
 10 AAAACGTTAT TAGGCGTTGT CGTTGCAATT CAATTTACAG TACCTGCTTT GATTGGTGCA 240  
 TTGGTTGCCA TGAAATTTGA CCTATCGCCA TTAGCAATTG CTGTTGTGGC AAGTGCAGCA 300  
 TATGTAGGAA GCGGTGCAGC GCAGTTTAA AATGGTGCTT GGATGATTAC GGGTATTGGT 360  
 15 GATTTAATnA ATACAATGAT TACAGCAGCG ATTGCAGTTG 400

## (2) INFORMATION FOR SEQ ID NO: 971:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

AAGTGTAAGA TTAGAATAAA AAATTTATAA ACGAATTGAG AAAGACCAAA GCTAGCAATT 60  
 30 ATTCAGAAAT TAAATCGAAG AGTCCTACAG TTAATGACTT ACCTGAACGA GATTTATCnA 120  
 ACAAATCTCA GTATGACCAA TATGGCAAAT GCCGTGTCCA TGTTAACTGA TGAAAAGTAC 180  
 35 TTTGGTGGTA GTTTTGAAAG ATTACAAGCA TTGACGACAA AAACAACATT ACCCGTATTA 240  
 TGCAAAGnCT T 251

## (2) INFORMATION FOR SEQ ID NO: 972:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

TGAAGCTCTT aATAAATCTT TTCTTGAACA CACACCAACA AAATCGTTAT CTTCATTAAT 60  
 50 AATAAATAAT GACTTACAT CTTCTAAAAA AATTGTACAA ATAGCGTCAT AAAGTGTGT 120  
 ATTCTCTCTT AGCACAACAG GTTGAGACAT ATAGTCCTTA ACCTCAAATT GTCGAAGTTT 180

TTCTAAAAAA CCTGACATTG TTAATATCGC TAAATCTGGT CTAAGCGTTG CTCTTGTTAA 300  
 ATTCAACTTA TCTGCTATTT GTTCACCAGw AATGGGTCCT TTAGTTTTAA CAATTTTCGAT 360  
 5 GATTCGTTCT TGTCTTTGAC TGAGTTCTrw AGGkCTTCac CCCTTTtTAT GCnC 414

## (2) INFORMATION FOR SEQ ID NO: 973:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 973:

GAAATCGATA CTAATATCTT CTTTATTTAC ACCTGCTAGT TCAGCTTCTA AGTAATATAA 60  
 20 TTCGTCTGTt CATAtATATt CGTtACAAaT GAAGGTGTtG AAAaGTAAaTT AAaTaCTTGT 120  
 TTaCCTAAAT CTTTAAaTGT ATCACTTGGA TTACCGTTAA AAAAGTTTTG ATTCTCGAAT 180  
 TGATTGAAGT TCAtATCATC ACTTCCATTA TAGAAATTTG TATTACAAAG CCATTATATG 240  
 25 AGTAGTATTA AAAAAGTTAA AGTAAAAGGG GAGATAAAAA AGTAATAAAT GGGTAGATTT 300  
 GTGCCTGATA AGGAATCAGG GCAAAAGAAC TGAGCATCGA GATTTATACA AGCAATAAAG 360  
 ATAATGAATA AACATATCGA TGCATACTTC TGCCCATCAC CTTATGATAG GGAGTTATTT 420  
 30 TTTGTGCGAA TAGTCAAAAT TTTAGAAAC AAAATTCCGC AAATTATTAA TTATATCTGA 480  
 TGCTTCTCGT TCTGAAATGT TGAATTCATT AAAGACcTTA ACAGAAATTT CAGCAAGAGG 540  
 GCTTTTTATT GCTTTACCTT GTTCTGTTAG AGAAATTTGT AGGTTTCTTT CATCTTTCTC 600  
 35 TTCACGTGTT CGAACACGT AATCTTTCTT TTCTAATTTT TTTAGTAATG GkGTCAGTGT 660  
 TCCAGAATCT AAGAACACAC GTTCACCTAA TTTTTTGATG TTAAGTTTTT CATCATTTTC 720  
 40 AATCGCCAAT TAAACCAngG TAnCnGG 747

## (2) INFORMATION FOR SEQ ID NO: 974:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 974:

TGCTTCCAAG TAATGTGGAC ATTTAATACG AGCTGGGATT GAGATACACC TTGCAATGCT 60

TCTTGGnCAT TTGCATTGCT TCTCCCAAGT GAATGCCTTT AACAGCTTGT GTCATCATCG 180  
 ATGACTTGCC ATTGAAATCG ACAACCTTCA CCTTCAAAC TAGCATCTTT TATAATGCCG 240  
 5 nCTTCTATAT CAAATGT 257

(2) INFORMATION FOR SEQ ID NO: 975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 975:

CAATGGAGCA TATTTTACGT TCGGCAATGG ACATTGATCA nACAACAAAA CATTATATAA 60  
 20 mTAATAAAGT AGAAGTTATC AAAGAAATTA TTA AAAAAGT AAGAGGGGGA AATCACGTGA 120  
 CATCACAAAA TCCAGAAGTT AATTACGAAG CATTAGCTAA ATATGGCCGC GACTTAGTAG 180  
 AAGAAGTTAG ACAAGGTAAA ATGGATCCTG TTATAGGAAG AGATGAAGAA ATTCGAAATA 240  
 25 CGATTCGTAT TTTAAGTCGT AAAACTAAAA ACAACCCTGT GCTCATTGGT GAACCAGGTG 300  
 TTGGTAA AAC TGCAATTGTT GAAGGATTAG CGCAACGTAT AGTTAAGAAA GATGTGCCAG 360  
 AATCATTATT AGATAAAACT GTTTTGTAGT TAGATTTAAG CGCATTAGTA GCGGGCGCTA 420  
 30 AATATCGTGG TGAATTTGAA GAGAGATTAA A 451

(2) INFORMATION FOR SEQ ID NO: 976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 976:

AACTATTAAT AATATTAAGT TCACTACAGA TGTTGCTAAT GGACCATAAG TTTTAAAGAC 60  
 45 ATCTTCACTT TTATAACCAA CAATCGCATC TAAAAATTGA ACTAAGATCA TTGCAATGGA 120  
 TATAGTTATC AAAAATATAG CACTATGAAT GACTAAAGAA AnAATAGCTA ATAAaATAA 180  
 AGGTAAGCTT CGACTAAGTG cATAATATGC ATTTATATTA TGGCTAGATG CACATGCTTG 240  
 50 AATTGAATAA CCTAAACTTA CACTGGCACT GATTATTGTA AATATTGCTA AAACAAAATA 300  
 CATGTTAATC CTTCTTTCTA TATTTGGATA TAAACAAGTA CTTGTCTAAA GTTATTTAAA 360

TATAACTATG TCATAAACTG AATTTGTTGA AATTTTTCAT TATGCAAATT TATTAATAAC 480  
 AAACAGCTCG AACTATAGCA TCATTTTACT AATGAATGCA TTAAAGTAAC TATGACTAAA 540  
 5 AATGCATATT AATTATCATT ATTAAGACTA T 571

## (2) INFORMATION FOR SEQ ID NO: 977:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 977:

CCCGAAAAAA TTTAGACATT TTCAAACAGT AACATTTGAA GATTTGTCTA AGCTGGAAAA 60  
 20 GAGTAGTATG CCATCAGGGG TCGGTATATT AGGCTATGCT GTTGACAAAG GTGTTGCTTT 120  
 AAACAAGGGG CGCATTGGTG CAAAAGAAGG ACCAGATGCG ATTAAACAAG CATTTGCAGG 180  
 TTTGCCGGAT TTGAATCCAT GTGnACTTTA GTCnGATTAC CGGAATGTTT ATCCTGGTCA 240  
 25 TGGGGGAATT AATTGGATAC CCCAAAAAGG AATT 274

## (2) INFORMATION FOR SEQ ID NO: 978:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 877 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 978:

nTnTTACTTC TTCTTTTAAT ATTTCTCGTA TAGCTTCAAA TTTTTCCTG TCAAACAGTG 60  
 40 TTCTTAATAT CCCTTGCTTT TCACGACTGT TTGATATTAA AAAGCGTTTG AATTCACCTT 120  
 GAGGCAAAAT AAACAATTGT CGGAATTGAT CTGCATTTAC TCCTAATAAT TCAATAATGA 180  
 ATTGGGTACC TGAAATTACT TTACTTTCTC TAATTTTATA CTTGCCATCC ACCATCTCAA 240  
 45 ATaCATCAAA TTTAGCGTTC GTTTTGTGTTG TATTACCTTC TTGATATAA GGGCCTTGTC 300  
 TATGCACTTT ATAAATTGCA TGATTTAATT GAAATTCAAA TGTTACTGAC ATCGGCTGTT 360  
 50 TACCATCAGC GAAATGACTT CTCAAATCAT TTTCTTCTCT TTGTTCAAGT GATGCTTTAC 420  
 CAAACAAGGC ATAAGTCATT GCATCAAAAA TCATTGTTTT ACCCGATCCA GTCTTACCAC 480  
 TTATTAAAAA CAATTCATTA TTATCAATTT TAGAAAAATC AATTTCTTCT TTTAAAAAGG 540

CGTTTTCTAA AATATTTTTT ATCTTTTITAG ATTGGATATC CgATAATTCT TTATCAGTTA 660  
 TATGTTTATA AAACATTTTCg ATAATTGACA TGTCaTCTTT TTCAC TTATT TCyATAGCAT 720  
 5 TATTTTCTTC ATnGTAATTA AAAGTTTCAT TCGTCAGCGC TAAAGTATTA GGATAAATTn 780  
 GTTTTAAACT CATCATGGGA TCAGTAATAT GAGACATATT TTTAAGTTTA AAATGTAAAA 840  
 TAATTATCGT TATnTTTCAC ATGAAC TTnT TCATTAA 877

10 (2) INFORMATION FOR SEQ ID NO: 979:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 624 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 979:

ATTGGTACTA TACCATTTGT CCATTTTAGC GAAGACGTTA AACTATCGAT TAGCTAGTGA 60  
 AGAAATTAAT CTCACTATAC CTTCTATACA TAAGCAAATT AAAAATTTAG AACAGCATCT 120  
 25 CAATGTGAAA CTATTTGAAA CTTATAAAAA TCAAATTATC TTGACTGAAG ATGGTCATAC 180  
 ATTTCTTCCA ATTGCGCAAA GTTTTATTGA ACAATATGAA AGTGGCATCA AACATATCCA 240  
 ACTTAAAAAA ACGATGTTTC AATCGAAATT AAATGTTGTC GTGTCTTCAT ATATCGCGAC 300  
 30 ATTCATTATG CCCAAATTTT TAAAATCTTT CTTTAACGAG CATCCTTTTA TCGATGTTTC 360  
 TCTTCATGTC AAAAATGAAA ATATTGAAAA AGATATTAAT AATCATACGT ATGACATCGG 420  
 GATTAGCAGA AATCAACCTA AACTAAGAGA AGTTCATTCT GAAAAAGTAT GCGAAGGTAA 480  
 35 AATTGTATTG ATTGCTCCCA ATAAAGAGAA TAATCATCTT CTAAGTGGG CATCTTTATT 540  
 TGAAAAATAC AAAATAATAA GTGATAACCA TCCAGAATAT TGGGTCATCA CTAAAAATA 600  
 40 ATATTTTAAA TATTTATGAA AAAG 624

(2) INFORMATION FOR SEQ ID NO: 980:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 457 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 980:

TTTGTCTGT TGCATAAACT GCAGCTAGCA TAATGTTAAT TGTGTCACCT ACGCTAACCA 60



TkGATTcATC AATTTCAGCA CCTAAAGCTT TAAATCCTTT AATATGTTGA TCAATTGGAC 180  
 GTGGCCCAAG TGGACATCCT CCCGGTAAAC CAATCACACA TTTTTTAAAT CTACCTAACA 240  
 5 TGGCACCCAT CATATAGTAT GAAGCACGTA ATGATTCAAC TTTATTATTT GGtAATGCAG 300  
 CATTtTGtAT TTCAGTTGTA TCAACTTCTA AwTCCGTACC ATTTaGTGaw GcCTTAAtAt 360  
 TTAAAtCtkC tAAtAAACTC aCTAAAGTTT TAACATCAGA GATTtTnGCGG TAACCCTTCT 420  
 10 AATTTCACAT GTCCTTGAGC TAATAATGTT GCAGGAA 457

(2) INFORMATION FOR SEQ ID NO: 981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 997 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 981:

ATTGCAGCAA CGCCCCCTGT AAAACTACGT ACTCTTACAT TTATGAAACC TGCTTCTTCA 60  
 25 AACATGCGCT TCAACTCTTC TTTTCCAGGA AAATTAAACG TAGATTGCTG TAACCATTCA 120  
 TATTCTTCTT TTGATTTTGC AAATAATTTT CCAAAAATAG GCATAACAAA TTTAAAGTAT 180  
 AGTGCATACA TTTGTTTAAA GACTGGCAAA GTTGGTTGGC TCGTTTCAAG ACATACCACC 240  
 30 ATACCACCTG GTTTAAGTAC TCTATTCATT TyTTTTAaCG CGACTAAATA GTCTGGCACA 300  
 TTTCTTAATC CAAACCCAAT TGTTACATAA TCAAAAGAAT TGTCTTCAAA CGGCAATTCC 360  
 ATTGCATCAC CATGAACAAG TTTAACATTT TCCATTGAAG CAGTTTTTTC TTTTCTACT 420  
 35 TCTAACATAT TCTCACTAAA GTCAATACCA GTAAC TTCAC CTGTTGGTCC TACAGCTTTG 480  
 CTTAATGCGA TTGTCCAATC ACCAGTACCA CAACAAACAT CTAATGCTTT CGTCCCTTTT 540  
 40 CTAACACCCA TGTCTTTCAT GACGCGTTTT CTCCATACTT TATGCTGCTC AAAACTAATA 600  
 ATATTATTTA ATCTATCATA TTTTTTTGAA ATATTTTGAA AAACGCGATG TACTTGCTCT 660  
 TTATTTGCTT TATTGTCAGC CATGCTTAAT TACCTCTACT TTTTAAATAA CTTTTTTGGA 720  
 45 TATCGTGTAa GTAATGCTTT ACTTCACTTT GATTATATTT CTTGAAGTAT GATGGATAGT 780  
 AATCAGACAT ATCTTCAAAT AAATAATTAT ATATTTCCGA CTCATCAATA TGATACCGA 840  
 AATGAGATAA CGTAAtATAT GGgAAAAGTG tTTCAATTTT TACTATTGCT TGAGAAATTT 900  
 50 CATAATCATT TAAAGCTTGA TGATGTAATG AAGATTTCAA TTCATTAATT TCAACAATTG 960  
 CTTTACTAAT TTCATTTTGA AATGATAAAT CATTGAT 997

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 982:

10 CATTCCCTTT ATCGGnACAA TTATTTTAAA TAATTGGTTA ATAAGTTTTT CTATTAATTG 60  
 CTGTTTTACT TTCTAGAGCA ACAATAAATG TTTTCAGTTT AAAATAATTA AGATTGTCAT 120  
 15 TTACTAATTT GCTTTTTCCA TTCTTTAACC ATAAATCAAC TTGTAATTGC CACTCAATAG 180  
 GATGATTTTT AATATAAAT TGCTCTGGAA AAATATAACC ATAATTGTGC ACTACTTCTT 240  
 GATCAGTTAA CTGTAATTGA TACATTGCAC TTAAAGTGGG TTCTAAAACA GAATTTTGCC 300  
 20 AGCGACAATA TTTGATATAT TGATTAATTG CGAACTTTGA TAATTTATAA ACAGCATGAT 360  
 AATCACAAGG CGCCTCATT AACAACCTCAC TAATTTTGGC ATTTCTTTTT TCAGCGACAT 420  
 ATTTGTGCCC GCCTAAATAT TGTATTTGTT GAAACATCAT TATTTGTTTT TTCTCTAAAT 480  
 25 TGAACGTATG AAGTTTTCGA GTGAATGGAT TAATAACAT ACTTTGAAAA TGATTGAACT 540  
 TCACTTTATT ATGACAATAA TCAACATCAT TTAAATAACCA ACTTACTTTA TATCCCATT 600  
 TCTTKAAACC TTCCGTTCTG TGAAGAATCT GTTTATAAGG AATTGGCGAA TACTGTAGCT 660  
 30 CAATAACATA TTTATTATTA ATCAAAATAT CCGGAATTTG TTTTATTTCT TTTAAAAATG 720  
 GCTCTATCTC TACTTTACAT CCTTGTTGCT GTATCATCTG TGCTAAAATC AATTTACTTT 780  
 TATAATGTTT AATCGTTTCA TTATTAAAAC ATTTTGTTC CGCTAAATGT TTATGTGCAA 840  
 35 AATGACTAAT TACTTTGAGC CCACGCTTTA AAATAACTTG CTTGCCACAC ACCGGACAAA 900  
 AATATTGTGT CTTTCTCAAT GCAGTAGTTG CTAATACGCG TTCCTTTTCT TCATTTAAAG 960  
 40 CTACTAACAT ATCTTCACCT CAAAATATTA CACGTAAGTT TAACTACTAT TACTTTTCA 1020  
 GCTTTGGAAA TCCATTAAAA AAAAGGGACC CCCAAAGGAG GCCTCCTTTC ATAnGTGCGG 1080  
 TGGCCTAATT AAATAATCCG TTAATTCCAG GTGGnCnC 1118

## (2) INFORMATION FOR SEQ ID NO: 983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CATCCCCTGT TAAAAATTGn TATTTGTGTA TTGATGCTTC TCAGnCATTa TTACGAGTCC 60  
 ATATTCATTG CTTCAAGTGAA ATATCAGTAG CAATAACATT TAAATCCGGC TTTTCACATT 120  
 5 TCAAGGTAAT TGCAGTACAC CACTACCCGT TTCCGATATC TACGGATTGT TGCATCATCT 180  
 TCTAACTGTT GGTAAGAAAT GCAACCATTa CTGCTTCAGT TTCAGGTCTG GTATCAAACA 240  
 ATTTGAGTTT ACATCAAACG GTCTACCTT 269

(2) INFORMATION FOR SEQ ID NO: 984:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 984:

AACCCAAGTG GAAAnnGGTTT TGGTGGAAAA ATTTTAGGTC CTTTATCTGT CGTGCGAATC 60  
 ATTGTATTTT TTAAACTTTC CGCATAATCT TGATGGTCGA TTAACTTTTC GCGATAACAA 120  
 25 TATTCAATCA CTTCAGAAAT CGCTTGCTCT GATATCTCTT CTTTTTGTAa ATATTGTATA 180  
 ACTTCTTTTT CAGTTCTCTT TTTATATGAT AAATATTGGA TTGCTTTATT TAAACCTATG 240  
 CGATAATGAT CATACTTTTG AATCTCTGCC ATGTCAGCAG CnTCAAGTTG TnGCCCTT 298

(2) INFORMATION FOR SEQ ID NO: 985:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 431 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 985:

CCATGCGATT CCACCTATTA ATAGTAAGAC AATAATAATA GGAATTATAA TTTTAACTT 60  
 TTTAGACATT TTGCTTCCTC CCAATTATTT ATGAGTTAAT CATATCAGAA CAATACATTT 120  
 45 TATTAAATGG TTTATTTTAA ATTTTGTTTA AATTAATAGA ATTTTAGTTA TAATAATGTT 180  
 TAATAAGTTA TTGGrAATCy AATAAACTAC mAAAAATAGT TTGATTACaT AATGATTCTT 240  
 GAAAAATGkT GGkTAACyTA ATAATATGCA TTTTTTkGGC GArGARgATT tATTtAACyT 300  
 50 ATAAAAATAT kGAaGTAAGA TtGGGGAGAT tATGAATTtA TGGrATtGAA AGTCGATGAT 360  
 TTTGTAAAGA ATATAAAAAG ACCATACTTG ACTGTATTGG GAGTATTTGT AGTTGCAGTT 420

## (2) INFORMATION FOR SEQ ID NO: 986:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 986:

AAGGTTAGGn TGGAGTACCC AAAGTAGGTT TTAAAGGTTG GAAATACnAG GAGGATGAAT 60  
 AACATGAATC AGTCAGTCAA ATTACTTAAA CATTTAACAG ATGTAAACGG CATTGCTGGT 120  
 TATGAAATGC AAGTTAAAGA AGCAATGCGT AACTATATAG AGCCTGTCAG TGATCAAATT 180  
 ATTGAAGATA ACTTGGTGGC ATTTTGGAA AGAAAAATGC TGAGAATGGT CAATACTCAT 240  
 TATGATTTCT GGTCTATGGA TGAAGTGGTT ATGGTAACAA GATGTAAACT GTTATTCATT 300  
 ACGCGTGGTG TGTGATCAGC nGCACTCAA 329

## (2) INFORMATION FOR SEQ ID NO: 987:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 987:

CATATTATTT nTATATGAGT TTACCAAGTGT CAAAAAACA ATTGCTTAAT GCCAACTATA 60  
 TTACATGCAT TGTTTAAACA TTAATTGGAA CGCTTGTTAT TAGTTTATAT GCTTATGAAG 120  
 CAGATGTGAT TGAACCAAAT TCAATCTATT TTTCAACTGC ATATGCATTT GTCATATCTA 180  
 ACTTCTTGTC TATACCAATT GCATTTAGTC AATTTACAGA ATTGCGTAGA GTCAAAGTGC 240  
 CATATGGTAT ATACGTGTTT ACTATTATCA TTTTAGTTCC ATTTTATTT TCAATTGCAA 300  
 TAGTATTGGT GAATTATTTT GTTCTAAGTC AATCATCATT CCCAGATTTA TATTCATATA 360  
 TTTTAAATAT TGGTTTTCTA ATTATAAGCA TTGTTATACT TATTGTTAAT TATTTTAAAC 420  
 AGCTCAATAA AATAAATACT AGAAAATTTA AAGGAGGCAG TCGATGAAAT TAGAACATAT 480  
 TACAAAAAAA TACGGCTCAA ATGTCGTTT AAATGATATT GATTTTGAAT TTGGCGAnAG 540  
 TAGAA 545

## (2) INFORMATION FOR SEQ ID NO: 988:

- (A) LENGTH: 607 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 988:

10 ACCTAGCATG ACATAATCAA ATATATCAAA AACACCTTTC TGAAGTGAAT CAACCGTTCC 60  
 AATAGTTAAT GGTCTTTCAG AATCAGATGT CTTTCCACCT TGAACAGTCA GATGACTAAT 120  
 TAAAATATTG ACGGCATCTT CATCAATTTT CCGGTGCTATT GTTTCAATAC AGCGCGTAAT 180  
 15 TCCCTGTTGA TGTGTTTCAA TGGTGTGATC TTCAAAGTAG TGTTTCATTT CGCTCACAGT 240  
 AGCATAAGGG AGTGTATAAA AATTAACCCC ATTTATCTCT ATTGGTGAAT TAATCGATGT 300  
 AAAATCTGTT CTTATAAATA ACTGATTATG TTCAAACCAA CTCGCCCCAT AGTTTAACCT 360  
 20 CTCTTTACCA TCGTGATTTC CACTAATAAT AATTATTGGT ATACGCAGTT CTAAATTTAA 420  
 CTTTCCAATC GCTTGTTCTA ATAACATGAT TGCATCTTTA CTTGGATATG TTGTGTCATA 480  
 TAAACTCCAG CTATCACAAT GTATCAGGT TCTTCTCTT TCATTTTTTC TACGAACATA 540  
 25 TCTAAAATAT ACGCTTGATC TTCTAAAAGC TGTTTGCCAT CTAATATTTT CCCTAAGTGC 600  
 CAGTCTG 607

## (2) INFORMATION FOR SEQ ID NO: 989:

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 722 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 989:

40 ATCGCGTTAA GCAACAATTA CAACAATCAT CATATAAGCT AACGCCACAA CGCGAACTAC 60  
 TGTTAGAGTT CTAATTGAAA ATGAAAAAGA TCATCTAAGT GCTGAAGACG TATATCTGAA 120  
 AGTAAAAGAT AAAGCGCCTG AAATTGGCTT GGCGACAGTA TACAGAACGT TAGAGTTGTT 180  
 45 AGCTGAACTA AAAGTTGTCG ACAAATTAA CTTTGGTGAT GGCGTCGCTC GTTTTGATTT 240  
 AAGAAAAGAA GGCGCAAAAC ATTTCCACCA TCATTTAGTA TGTATGGAAT GTGGTCGTGT 300  
 AGATGAAATC GATGAAGATT TGTTACCAGA AGTTGAAAAT CGAGTTGAAA ATGAGTTCAA 360  
 50 TTTTAAAATT TTAGATCATC GTTTAACTTT CCATGGTGTG TGTGAAACGT GCCAAGCTAA 420  
 AGGTAAAGGA TAGTAAATTG CGTAGGTAA ATTAACCTTC GCTTTTTTTA GAGGTGTGGT 480

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TAACACAATT GGTGCTTATA GACGTGATTT GAAAAAGTAT CAAGATTATA TGA CTGAACA 600  
 TCATATCTCG CATATTGATT TTATAGATCG ACAATTAATT CAAGAGTGTh TGGGGCATT 660  
 5 AATAGACCAA GGGCAATCTG CTAAATCTAT TGC GCGATTT ATTTCAACAA TCCGTAGTTT 720  
 TC 722

## (2) INFORMATION FOR SEQ ID NO: 990:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 990:

ATCCAAAAAA TACGAAAGCG CTTTCTATAT TGGTATGCAA GTATTTCAAA AAGAATAAAT 60  
 TTAATTTTCC TACTTTTCTA AACATTTATC TTTATGTATA ATGTTTTCAA GTA ACTAAAT 120  
 TATAAATTAA ATAAAGGGAG TGTTTATCAT GCTTACAATG GGGACAGCAT TAAGTCAACA 180  
 25 AGTAGATGCC AATTGGCAAA CTTATATTAT GATTGCCGTC TACTTCTTGG GThATGACTC 240  
 CAAC TTATTG ATAGTGTTThT TATGTTTCAG ATAATGCCCG ATGACTTTGT CATGCCAGCT 300  
 CCACCGATTT TGAGThAACGA CAGCGACTTC CGTCCCCAGC CGTGCCAGGT GCTGCCTCCA 360  
 30 GTATTC 366

## (2) INFORMATION FOR SEQ ID NO: 991:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 991:

TGACTACAGT AACATTACCT GTAAATAATG ATTGAATGGC TTCATTTTCA TCATGAATAC 60  
 45 CTGTAATAAA TTCTAATTCT TCATCTGAAA CTTTTACAAT ATGCGCCAAT GGCAAAAAGG 120  
 TATGAATAGT TTGTCTTAAA TCTTCAGCGT TATCCCATAA TGGCAATCTT ACATTAGGAT 180  
 CAAATACGAC AGTACCATTT GCATTTAATG TTTTGGTAAT CAATTGATAA TGTGCATCTC 240  
 50 TCATCGGACT ATCGACCAAA TCAACAGAAC AAAAATGTAC TACATCATTT TCATTCACAT 300  
 CaATATCATT CACAAAACtk GGkTCaAaTA aCATATCn 338

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 992:

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AGTTCATCGT ATTCTTAATA CCTATATGCT ATCGTTCACA AACTTTTGTT CTTTCTTCC      60
AACATACCGC CTATAATGCT CAAAAAGAAA TCAGCAGTGG AACCCTACG TTCCCTACCG      120
CTTTATCATT TTCAGGCTTA AATATTTTAA AAATTTGTG AGGAATCCGC TTAAAAAAC      180
TCATATCTTC AAAAAAATG ACAAATTTA AATTTTGAA TAACATCATT TTTTAGTAAA      240
TGTATAATT TCTTATAAT ACAAATATCG AAAGAAGCG ACTGACTTTG AAAAAATTAT      300
GTTCAATTAAT TGTAGGTAGC ATTAGTTTGT ATCCTTGCCA TTATCAGCTT GTGGnAAAGA      360
ACnAACnAA A                                                                371

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(2) INFORMATION FOR SEQ ID NO: 993:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 993:

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ATAATGATTT ATCAATCGAT GTTAGATGCG GTTCAATTAT ATCCTAAGTC TATCGTGGTT      60
GATTATACTG TGGATGGACA ATACaAAAAT GATTGTCACT ATTTCCGTCA ATCATCGATC      120
AACATTGCCG ATTGGGCTCA AAACAATAAT TATTATCCTA ACCTGATATA TGCATTCAA      180
CAGACTCTTG ATTTAATACA TTATTACTCT GTAGAAACGA TTTTCGATTT AGCTTTATTG      240
ACACTTCTGA AAGGTGATTT ATCAATCGAT GGTCATGTCG TTTTGTATTT TAAAGCCCCT      300
ATAGCAACAA GTGCTTCAAT ATGGGAACT ATTAATACTA TTGAAGATTT TGATATGATG      360
TCcAGTTTTt TTGAtAAAtG GCTTATATtG ATCATCATCC TATACCTTTT CGCAACCTTT      420
TTATCGAGGA TTCAGAACAA CTTAATTCGC CAGATAATTG GTTGATTCTT ACCAAGTTTA      480
TGCTACCTAA ATGGGnTATA TAAATAAGC AAAGCAACGT GCTGATAACA                    530

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(2) INFORMATION FOR SEQ ID NO: 994:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 551 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 994:

TATTGGATTn TnCCACCAA AGGCAACGGT TCCTTTTCTA ATTCTAATAA TCAAATCCCC 60  
 10 ATTAATATCA ATCCCACTCA AATTCTTTCA CATCATTGAG TATAAAATAA TATGGTGATA 120  
 TACGTTGAAG TTGATTnTCT TATTTAAGTA TACTCCAACA GTATTTTATA AAATTATTTA 180  
 GTCATCATCT TCAGTGTTTA ATTCAAAAAT ATAGAATCTA CTGTATTGCA TAATAAATTG 240  
 15 AAATGCCACA AATTGTGTAC AAGCAATAAT AATGATACTT ACCATTATGA CAAACTTGGA 300  
 TTCTACGACA TTGGGCACCA ATATATATTC GATAATTCTT TCAATATATA TAAATGCGCT 360  
 CAACGCGGTT AATAATAAAC CGAAATGTGT TTTaGTTTTA CCACCCCAAC GTTTTGTYAC 420  
 20 TTTAGGTAAT TTTAATAACG TGAACATTCC GCCAATTACT AATAACAAAT AACTAATTAT 480  
 GATTGAAATC GTACCCATCA ACCAATAATT GAATAGGTCA TAATGATTTT GTACAGCAAC 540  
 25 AAAATAATAA A 551

## (2) INFORMATION FOR SEQ ID NO: 995:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 729 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 995:

ATTGCCCACC ATTAGGTAGT GGAACACGAA CTTTCATCATC TAAACCTTTA CCAATTAACG 60  
 CTTTAGCCAT TGGTGATTCA TTTGAAATCT TACCATTAAA TGCATCTGAT TCAGCTGAAC 120  
 40 CAACGATTTG ATAACCTTCC TCTTCATCAC CTGGTAATTC TACAAACGTT ACTGTTTTAC 180  
 CAATTTTAAC AACGTTGTTA TCTCCAGTAT CTTCAATGAT TAATGCATTT CTTAACATAT 240  
 45 GCTCAATTCT TTGAATATCT TGTTGATGA ATCCTTGTTT ATCTTTTGCT GCATCATACT 300  
 CAGAGTTCTC TGATAAGTCA CCAAATGAAC GTGCAACTTT AATTTTCTCT ACAACTTCAG 360  
 GACGCTTAAC TGTTTTTAAT TCTTCAAGTT CACGCTCTAA TTTTCAAAA CCTTCTTGAG 420  
 50 TCATTGGATA TTGCTTTTGA TTTTCCATAT TGTCATCTTC CTTTACTGAA TTATACTATT 480  
 GCTTGCTAAC TAAAGACTGA ATTTTGTG TCATAATATC TATTGCAACT TTATTGCTCC 540  
 CACCTTCAGG AATAATTATA TCAGCATATT TCTTAGTCGG TTCAATAAAT TGGTCATGCA 600

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TTAGTATCTC GTGTTGAAAC GGC GTAATAT nCTCAAGTCT GGCATCTGTA TCAACATATA 720  
TnTTnAACA 729

(2) INFORMATION FOR SEQ ID NO: 996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 996:

GACAAATATA CTGCTTCTAC TCAAATATTA GTGAACATGA AAAAGTCCTC AAGTGATTTA 60  
GCTTTCCCAA AATGTTCAAA GTAGTTTGCA GTCTGTTAAT ACATATACGG AnATTATCAA 120  
AAGTCCTAGA TTCTAGATAA AGTATCTAGA GAATTGATGG TCAGTATTCA ACAGCTGAGT 180  
GAAATCATTT TAAAAGTAAC CATCCAACCA ACTCTCAAAT TATTACTGTA CAGTTACACT 240  
GGGATAATCT GATCTGACAA ATGTATAAAT ACTAAGTTTT GCCAGCAGCT AAATAGAGGT 300  
GTATGTACGA CTTCCAnCTG TAGnG 325

(2) INFORMATION FOR SEQ ID NO: 997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 997:

CTTCAGTTGT CGGCAAATCT TCTATATTGG AAATACCAMA TACATTTAAA AATAAATCAG 60  
TAGTAATTAA CTGTTGGCTA CGCTGTTTCAT TAACCACTTT AGCCTCAACT AGTCCTTTGG 120  
CAATCAATGT CTAACTGCA CCATCTGAAT TGAtACTACG AATTAATTCA ATATCACTTC 180  
TTGATAATGG CTGGTTATAA GCAATAATTG gATAGTACTT CCATTGCTGC TTGTGAtAAT 240  
TTCATTTGTG aCTTTTGTTC AATTGAATTG T 271

(2) INFORMATION FOR SEQ ID NO: 998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 998:

TTTATGTGCT AATTTGTAAT TGAGATTCAT AATGGTATTT AAATCATTAT GGTGCGGGAG 60  
 5 TTATGGTATT GCCATAATAT GAGAGTGCAT CCACTTCTAT AAGTAATGCA TATTGCGAGT 120  
 GCAGGaATGA ATGAGTGCTT GATTAAAATC CTTATGGGTG GTTGACATAA TTTAAAGAAA 180  
 CCACATTTAA AATTTCTTAA TCACAAGCGG TTAAGTAGGT ATAGTTTAGT TTTGAGTAAA 240  
 10 TCTTTTTTAAA GGTGTAAGTG TGCATTTTAC TTAATTAAAG ACATAAGACA TTTAATCGGC 300  
 CTAAAATAAA TAAAAAACTA CCTGTTTAGG TAGTTTTTTT AATGTAATAG ATTAAAACAC 360  
 TAGTTCATTT CTTATTAAAG ATGGATAGTT ATTTTATAGA TAAATTTGTC CTTTAGTGTA 420  
 15 GCGGTAATTT TTAGGACTTT TTGGTGGAaAA AAATGTTCTT AATAAAAGTA ATAGTCCTAC 480  
 TTTACCGCCA AAGCCATA 498

## (2) INFORMATION FOR SEQ ID NO: 999:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 999:

TGAGCTGGTT GTTTATTATC ATCAGTTTTT TTCTGATTAT CATCTGATTT ATCTTGAGAT 60  
 GCTTTGTCAT CCTTATCTTT CGACTCATCC TTTGATGCTT TATCATCATT CTCTTCTTTA 120  
 GCAGGACGTT GCTTTGTAGG TGCTTGTTGC TGAGGTGGCA CATATTGATA TTGATTCTGC 180  
 35 TGTGGCAATT GCTGATATTG GTTTGCTTGT GAATCTAGCT CATTCTGCTC TTTTCTCTCT 240  
 TGTGCTTTT TCTTTCTCTC TTTTCTGCA TTTTCTTTT GACGCTTTT TTTTGTTC 300  
 40 TGCTTTTGT CGTTCAACAT ACGTTCTTTA GCTTTATTCG AATGATCTAC ATATGCAAAA 360  
 ATTGCAAATA CTAATCCTCC GAGTAATAGC AATACCGTCG CAATGCTAAC TACTTTCGCT 420  
 GTTGTACTCA TTTTCTTCTT ACTTCCATCT TCATTTTAT TGTAGTCGTA ATTTTGATTC 480  
 45 GACATACTCT CCCTCACTTC AAACAAATTT AAATATAGAA ATTATCACGC AAACATTAAC 540  
 ATTTTCACAA CTAATTTGCG ACCnAGTA 568

## (2) INFORMATION FOR SEQ ID NO: 1000:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1000:

5	AGTGTCTTCTA ATTGCAAAAT TCCAAATACA GTGTCGTTAT TTACTTTTTT CATGCTAAAC	60
	ATCTCCCAAT TAATAATCAC ATATTTAGCT ACTATACAAG TATTAACAAA CATCCCAACA	120
	ATCCCAAAAC TTGTATGTGC TAACTTATGC ATAAACTAC AAGTGTAAT AACTTGCTT	180
10	TCTATTCAAT TGTCAAAGTT GAATAAAATT AAATAAGTAT AAAAACCAAT AATCAATAGA	240
	GTTAATATTT AGAAATAAGA TAATAGTACA TAAAACAAAT CACTCTATTA CATATTAATT	300
	TTATAATTTA TATACAAAGA AAATATATCA ATATTACCAT TAAATTGCAA CAATTCTACA	360
15	TATATTTCTT CAAAAAGAT ACGCATTGAA TTTTATTAC ATATAACTCT CATGAAAATT	420
	GATTAACTA AATTAATTAG TTAGCCTTAA ATTAAACAAA TTAAATCAAA CCGAATGAGG	480
	CTAAATTGGT TATTTTTCAA GATATGATT GTATAAATCA AACATTCT TACAAATCAA	540
20	ATGTGTATAA AATGTGATAT ACATTTTCAA CCTTAAAAA GTTCTAAAAA AAGATGAGCA	600
	TCTACTGTCT CATCTTTCAG TTCTTTTFTA CGGGTCTGTT TTCTAATTG AGCACAATCT	660
	TCGATTTCTT TATCTAAATG ACTACCAATT AAATCTATTT CTCTATTGT TAAATCGCTA	720
25	TCTCCATCTT CTTTATCTC TGGTATTATT TTTTCTTCAA CTAAGTCACG ATATAGTGTT	780
	TTTGAATTCT CGTTCAATT CGATTCGTGA TTTGAATAC TTTCTCCGC ACCAATGTAT	840
30	ATCTATTGGC ACTAGCTTCT ACTTTTGAC CATCAATAAA AATTGAATTA TCATCAATAA	900
	GATTTTGCTT TAAACATTGA CTATAGAAGT GAATAAATAA AGATTCAATT AACGCATCAG	960
	TATTAGGATT CACTCTAAAA CGATTAAATAG TTTTATAAGA AAGTGTTTGA TCTTGGGCTA	1020
35	ACCACATCAT TCGAATACTG TCATGAAGTA ATTTCTCTAT TCTACGACCA GAAAATACAG	1080
	ATTGAGTATA TGCATATAAG ATGATTTTTA ACATCATTTT TGGATGATAG GATGTTGCAC	1140
	CACGATGATG TCTGAATTCA TCGAATTCGC TATCAGGTAT CGTTTCAACA ATTTCAATTAA	1200
40	CATATCGCGA AATATCATTT TGAGGAATTC TAACGAAGTT TCTATTGGTA GTGTAAGTTG	1260
	GGGTCATGTT ATAATTTTTA TACATAAGGC ACCTCTTTAA TTTAGTTTAG TAGTATTTAT	1320
	TAAATTATAC GaAGGGACCC AACACAGAAA ATTCATTTTA TTGAATTTTA CATTTATGTG	1380
45	CAAGTTGGGG AAAAATGTCT TATTTTTTCA AAGTATTTAA AAGTAAAATT ACATGTTAAT	1440
	A	1441

## (2) INFORMATION FOR SEQ ID NO: 1001:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 587 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1001:

	TAATAATATC TGTCATATTA AGTCTCCCTC ATTAGAAGTC ATTATAAATG AAGTTATTGT	60
10	GTGTGTCGCC ACTGCCATAA ATTAAATATA AAGTAATAAA TATTGCCAAA TACAATAGTG	120
	TTAATAAATA TGGTTGAAT GCTTCAACAT ATTTATTAGG TGGCTGTTTA CTTTITAGATT	180
	TCATATTGCA CCTCTTAAAG TTCTTAGTAA AAACGCCTTT ATAAAGACCG TTCAATATAA	240
15	AATACGTTTT AAAATTTGTT TTTTACAATT CATTATATCG ATATTCATAA TGAAATTCAA	300
	TTTTAATTTT ATAGATTCAA CATAGTAATT GGTGTGTCATC ACTCAAKTAT TGTAATGAT	360
	ACACTTTGTT GAGrACATCA TTCATTTTAA AGGTTATTTA AACAATAAAC AATTACAGTC	420
20	TATATAACAA TTTTGTATA TACGTCAAAA TCAAATAAAC TCATCACATT AATATGACGA	480
	GTTTATAATG TTATTGAATT ATCATCAGCG CAAATATATA CATTGCAAG TCAAGCATAA	540
	CATATTTAAC AATTGCTTTG CTTGGTTTTA CCAATGGATT AAAAACC	587

25

(2) INFORMATION FOR SEQ ID NO: 1002:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 522 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1002:

	CAATTGTGTC ATAATTTTGC TGATGATAAC TAATCGTTTT GGAGTAGCTA TTTGATGAAG	60
	TTCGTCCAAT ACCTTTTGTT GAATCGAATT TACCACCTGA GCGTATATGA AAATGTACTG	120
40	TCTACTTTTG CAGTTGAAAT TTTATTTTTC GGCAATTGGT CTAATATTTT AGTTTTACGA	180
	TTTCTTTTTT CTGAAAATC TACATGGTAC TCACITGGAT ACTTTAACCA ATTTGAATTT	240
	TTTTCTTCTT TATGAGATTC AAACITTAATA TTTGAATGAA TTGAGCCTTG TTTTTTAACA	300
45	AGTAATACAT TCTGTGCATA AGTTGGATCA TCGATAAAGT CGAATTGTAA ATTTTGGAGT	360
	ATATTtGTWT TCTCATCATA TACTGTTTCA GTTCGTTTTG TGATTTTACC GTTTTTCCCA	420
	ATATCATCCG GTGCTGTTGA ATTTTATCT TTATTAGTAA CATTACGTTG CTTTTGTGAn	480
50	CTTATCAACA TGTCTTCTAT TTGGCTGAnG CTTATGGnGA TT	522

(2) INFORMATION FOR SEQ ID NO: 1003:

55

(A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1003:

TCTTTGTTTG AGACATAATG TCATGTAAAG TTTTCACAAT GCGTTCTTCA ACTTGTTGCC 60  
 TTGCCTCTCC TTTGAAAGGA ACAATTCGAT CTCCGAATAA GTCCTCAGGC TTGTATAGAT 120  
 TATCAAATAG ATAGACTGAC TCACCTTCAA ATATTCCAAA ATGCCATTCC TTCAGTCCCT 180  
 TAAAACGTTG ATACGATTGG WTAGGTGCAA CATTTTCAAG TGTGTCACTT GCGCGTTCTT 240  
 GCGTTGATGA TGCATATAAA TCGAAGTTTA TCCCCTTAGT TTCATAATAA CTACGTGCCT 300  
 TTnGAGCTTG AGCAATTCCA AGT 323

## (2) INFORMATION FOR SEQ ID NO: 1004:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1004:

TTCTAACTTG ACGTGACTGG GCATTTCTGT GnAAATnTTC TGACATTCTT TTTAATATCC 60  
 GCAACGCAAT TGCTTCAGTT AAAGATTGnA ACTTGCAACA TTATTGGTA CGAAAAAGTC 120  
 AGTTTTAATG TCGATATAAG ATTTATTTTT TTTGTTATAT AGTTTCGCAA CTACATTGG 180  
 TTGTCTTACT TGATCATATT TTGCAACCGT ATCGAATGCC GTCTTTTCAA ACAGCTTTAC 240  
 GAGATACGTA AACCATGACC CATCCATCGA AGTCCTTGGT AAAAACCAG GGTTCGGAA 300  
 GCCGTAGGGT TTGAAAGATA 320

## (2) INFORMATION FOR SEQ ID NO: 1005:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1005:

nATTAATGCT AGCCAAAACA GAnTTGCAAn ATGTAAAGAC ATGTGAAACC CTCCTTATAT 60

CGATATTTAT AAAAAATAAT ATTTCACTTA ACCAGTTTTT AGTTATCATT GCAATGGTAA 180  
 AGGATACGAT GAGTATCACA CCACAAATGA TAATACCAGG CAGGAGCCAA CATAAATCAT 240  
 5 CTAAATCTTT ATTATATGTG ATTAAAATAT TAAAGATAAC AAAAGTGGTA GTAATAACTA 300  
 TATTG 305

(2) INFORMATION FOR SEQ ID NO: 1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1006:

TTCAAGATAT CAGTATAAAT AAAAActTAA TATGCTCATT ATAGACAGCT ATAActATAT 60  
 TTTCTCGTCC CACTCTATAG AAATCAATTT CATTTATTAC CATTTTCTCT ATTTAAAAAC 120  
 ATATTTTTGG TATTAACAAT TAAAAGTGGG TATATATATT TAATGAACCA ATTTTTTAGG 180  
 25 AAAGTAGGGC TAAACCTATG GAAAATAAAT TATACCACAT GGTGTCCTCT TTTACCATGA 240  
 ACACAGTGAA TTAAAAAATA TTAAnCAAGG TATTGGGGAA GTAnCACCAG CATTAGGTCC 300  
 AATTGGTAGC CACCTTCCAA TCCATTGGGG GnAA 334

(2) INFORMATION FOR SEQ ID NO: 1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1007:

AGAAAATTIG TTATATTAGA AGCGAATAAT TTAAAACAT ATTATGAAAT GTAAGAAGAA 60  
 ATATTATGAA ACTAGGAAAA GTAGATTGTT GAAAATTCCA TACAATAGGn GAnGTAAAGT 120  
 45 GAATAAATTC TGGTATTACT AAAGCTATTG ATTGTCCTAA TTGTAATAAA AAGTTGGATA 180  
 GTGTAGTTGA GGGGAGAAAA ACTAAAATGC AAAAATATAT TCTCAATGGA TCATTATAAA 240  
 TACCAATTAG aTTAAAGTAT TGCGaACATT TACAATTAGa AATCAGTATT AATCTGCCAT 300  
 50 AGATAATTGT ATTAATGTAA AAmATAAAAT AGAATGAGAA TATACGGAAA TTTTTTATAC 360  
 ATTTATAACC AATTCTGTTA AACTGTGAAG AGTAGAGTTA AAAACGAACT TTTTGTttAT 420

AATGATTGAA CGCTATTCTA GAGAAGAAAT GTCTAATATT TGGACTGATC AAAATCGCTA 540  
TGAAGCCATG GTTAGAAGTG GAAAT 565

(2) INFORMATION FOR SEQ ID NO: 1008:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1008:

CAACATTAGC GTCTAAACAA ATCTTTGACT AAACG TTCAC TTGAGCGACC ATCTTGATAT 60  
TTAAAATGTT TATCTAAGAA TGGCACAACCT TTTTCAACCT CATAATCTTC ATTGTCCAAA 120  
GCATCCATTA ATGCATCAAA GGACTGTACA ATTTTACCTG GAACAAATGA TTCAAATGGT 180  
TCATAGAAAT CACGCGTCGT AATGTAATCT TCTAAGTCAA ATGCATAGAA AATCATCGGC 240  
TTTTTAAATA CTGCATATTC ATATATTAAA GATGAATAAT CACTAATCAA CAAGTCTGTA 300  
ACAAAGAGAA TATCGTTAAC TTCACGATGA TCTGACACAT CGATAAAGTA TyGTsTATGT 360  
TCACGTGAAA TAYYAAGTCy ATTtTTTACG AaCGGATGCA 400

(2) INFORMATION FOR SEQ ID NO: 1009:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 454 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1009:

TATTGTAAAA ACTGTGGTTC TTACAATGGC GAAGAAGTAG CAGCTAAATA ATTTTAGTTA 60  
CTCAATATAA AAaGTCCCGC TTAaATGAT TGTTTTAAGT GGGACTTTTT ATATTGCGAA 120  
AAATAATTGG cGAACGAGGT AACTGGATAC CTCATCCGCC AATTAAAATT TGTTAATTTA 180  
ATAATTAAAT ATAAAGACGA TTTATTAGTT TTTACGTTTT CTAGGTAATA CGAATGCAAC 240  
GATGCTACTT AAAGCTAATA ATGCCATTAA TGGAATGTC ATATCTnTAT TTGATTCTTC 300  
ACCAGTTTGT GGTAATGATT TGCTTTTATT TTCTTG TGTA TTGTATTGT TTTGGCTTTG 360  
GAGTGTGTCC ATCATTTGTG TTTTAAATGT TTGCTTnTnG TAATGGAGCA CTAATCTTTT 420  
GCCTCGCTAG AACCTGCCCG AGGTTTGGA CCAC 454

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1010:

GGTACAACAA CTTTAGACAA TGAAATATTA AAAGATACGG ATGATAAAAA GTCGAGTAAA 60  
 ACTTTTGTG GCGGAACAAA AGTTGATGAC CAACATGCTA GTATCGGAAT GGATTTTGAA 120  
 AATCAGGACA AAACTTTAAC TGCCAAAAAA TCATATTTCA TATTAAACGA TAAAATTGTC 180  
 TTCTTAGGAA CTGGCATTAA AAGTACTGAT TCATCAAAGG ATCCCAGTTA CCAACCGATG 240  
 AAAATCCGCA AGCCGATGGG GAATACGGTA TTTTCCGGCC GTTAACCAAC CACCCATTCC 300  
 GGTTATCCGG GAAACCATTG CATCCTTTTA GGAGnChCCG GTnChnAAAA GGACCTCGGG 360  
 TATCCTTTTT TTAACCAACC CGAAATTACT GGTAAAAAAG 400

## (2) INFORMATION FOR SEQ ID NO: 1011:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1011:

TTAGGTATTC GCAAAAATGA TCTTCAATAT ATAGCTATGG CCAAAAGATG GGCTAAAGCT 60  
 TATACAATTA CTGTAGCAGT GGGAGTTGTT ACAGGTACAA TTATAGGACT TCAATTATCA 120  
 TGATTTGGCC TACATTTATG GAAATGGGTG GACACGTATT GCACCTCCCT TATTATGGGA 180  
 ACATTGCGGT CTCTGGAGC TATTTCTTAA GTATATATTA TATACTGGGA TCGTTTAAAA 240  
 TAATGGCACA TTCTTAATAG TATACCAGTA ATTATGGGGC CTTCTCAGCA TCTCATACTC 300  
 AGGAATCATT ATGAATACGC CTGCAGGTTT GAGTGAAGAT GGAAGTGGCC ATGTCACCnT 360  
 AGAGCGTGTT ACCCACGTTA AGTCGTCATT nCGAATACAC 400

## (2) INFORMATION FOR SEQ ID NO: 1012:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1012:

CTTTATGGGA TACTACTACAA ATCGAGACTA TAAGGTTTTT TATTTTATTT ATTATTACAT 60  
 5 TATCAATAGT TTTATAATCG AGCTTCAAAA CTTTAGAAAA TAGTAGAAAT AGCATTCAAT 120  
 ATAGTGCAAA AGTGCAAATT GATAACTTGA CACTTATCTC CTATAAACCG TACAATTAAT 180  
 TTGTATGATT TATATATAAT TTCATAAAGT CATATTGAAT TTCATATAAA GAGCAAACCC 240  
 10 TAGAAAAAnGA GGTGTTGTGG AATTATTAAG CTCCTACTCA TTTGCGGGGT CATCTAGGGT 300  
 GTGGAGGATG TGTGCCGAAT TGTGCTCAAA nATCCCAGCA GCAACGCGAG TTGAACAGCC 360  
 TAAGACGCAA CAAAGGATCT GnnAAGGACC ATCAGGCACG 400

## (2) INFORMATION FOR SEQ ID NO: 1013:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1013:

GTCGTTGCTG ATACCACGCC AGTATTGGTT TTAAATGATA AAAAAATCTG TGAGATTGCA 60  
 TCATTGAGAC AAACATCGCT ATTTGAAATG GCCGAATATA TAGGGTTTAG CGAGCCACAG 120  
 30 AAATTAGTAC AATTATTTAT TAACCATGAT AGGAAGGTGA GACGCCAATG AATCAATATA 180  
 ATACTATAGG TTTTCACCCG GGAAATAGTC GTATTCATCA ATTAAATGCG ACTGTTAAC 240  
 TTTTATnCTT ATTAGTTGTT CTATTCTGCA ATGGTnCTAT GCACAGGTAT TnATTTAATT 300  
 35 AGGCTCACAT TTATGGGCAA TTCTCAATGA TGAACAGTCG TTGTGTAATC TCG 353

## (2) INFORMATION FOR SEQ ID NO: 1014:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1014:

CAAAGCCTTC AACAAATAAT CTTTATTAG TACTGATTGG TTGCACAACA TAAGTTACAC 60  
 CAGGTTTCATC TTAAATGTA ACTTCCTTAT AGAAGAGACC TTTTTTAGCA CTATACTCTG 120  
 50 TTTTCTCTGA TTTAATTTTA TCTTTTAGAT TTTTCTCTTC CAAGTAACTG TCAATTAGTT 180

ATGAAATAAA TAATATAATG ATAACCTTAA TCGCGTTTTT TTTCTTCTTC ATTATGTAAC 300  
 TCCTTTTTTG TCCTTTTTC AGTATGAACG AATCAATTTA TTTAATAAAG AGTTTTTACC 360  
 5 AGATTGTAAC AAATTTTTTT ATTCTCAATA TTATTATAGA AATCGAATTA CATAACGAT 420  
 GCTTTTAAAA AATTTAATAA CAAATTTTAT TTTACTATCT ATCAAAATAA TTGACTACTT 480  
 TTAACAATTA AGGATGATAC AATTACATTT TTTTCAATTT AAAAAATCAG TCATATCAGT 540  
 10 AATTACCGAT GAAATACTA AGATATCGAT ATATTTTGCA TTATTTAACA TTTAAATTCh 600  
 ATTATAGACA ATTCAATAAT TGCGATG 627

## (2) INFORMATION FOR SEQ ID NO: 1015:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1015:

TAGTGTGACA TTAACACTGG AACAAAAAGA AGCTGCAATT GCAGAAGTTA ATAAGCTTAA 60  
 ACAACAAGCA ATTGATCATG TTAACAATGC ACCTGATGTT CATTCAAGTTG AAGAAATTCA 120  
 ACAACAAGAA CAAGCGCATA TTGAACAATT TAATCCAGAA CAATTTACGA TTGAACAAGC 180  
 30 AAAATCAAAT GCAATTAAAT CGATTGAAGA TGCAATTCAA CATATGATTG ATGAAATCAA 240  
 AGCTCGTACT GATCTAACAG ATAAAGAGAA GCAAGAAGCT ATTGCTAAGT TAAATCAATT 300  
 AAAAGAACAA GCAATTCAAG CGATTCAACG TGCGCAAAGC ATCGATGAAA TAAGTGAGCA 360  
 35 ATTGGAACAA TTTAAAGCTC AAATGAAAGC AGCTAATCCA ACAGCAAAAG AACTAGCTAA 420  
 ACGCAAGCAA GAAGCTATTA GTAGAATTAA AGACTTTTCA AA 462

## (2) INFORMATION FOR SEQ ID NO: 1016:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1016:

TGATTGGTCC CATCGACTCG TTATAACAAA TTGAAGGTAC AAAAGTATCT TGTGATTTAA 60  
 TAAATTCAAG TAAATTCGTA CCTGGTTCTA CAAGGTAATT CTTTCCATC AAGTGTAACC 120

ATAAATTGCG CATATCCACC nAAAATAACG ATGCCCCACA CATCTTTCAG ATAGG

235

## (2) INFORMATION FOR SEQ ID NO: 1017:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1017:

GTTGAAAACAT ATAAGATCA n ATAAAGGTAA AACAGTGGTT TGTGTCATTA GTGGTGGTAA 60  
 TAATGATATT AATCGAATGA AAGAAATTGA AGAACGTTCA TTACTATACG AGGAAATGAA 120  
 GCATTACTTT ATCTTAAATT TCCCTCAACG TCCAGGTGCA TTGAGAGAAT TTGTAAATGA 180  
 CGTATTAGGA CCTCAAGACG ATATTACTAA ATTTGAATAC TTAAAAT 227

## (2) INFORMATION FOR SEQ ID NO: 1018:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1018:

GTCTTACTTG CACAAGGTAT TATTTCTATC TTACTCGTTG CTTTCGCAAT CATGCTATAT 60  
 ATCATTAAATA TTTTAGATGC ATATCGTAAT GCTGAACGAT TTAATCGCAA TGAGGAAATA 120  
 AAGGATCCGA AGCGCGTATG GTGGCACATG GGACAAGACG TTCCCATACT TACTAATCTC 180  
 ACCAGGTACA TnCTTATTGA TATTGTAGTG TAATTCCATT ATATTATGTT GGAGTAGCAT 240  
 TACAATACAA TTATACACGC GCCTCGAGAC nACATAGATG GGTG 284

## (2) INFORMATION FOR SEQ ID NO: 1019:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 779 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1019:

CAATCATCAC ACATAAATGT TCGAATAGGA TTGTTTTTAA GTCGTTTGA CTCAGTTGTG 60

	CACCTCAATA TGAGTTACAT GGTGATTTCG ATATGAATAA CCATCTTCTT GATTGTAAAT	180
	AAAACATATCT ACACCATTAT CGCTGTAAAG TCGTTTACCG TCTTTTGCAA ATTGGAAAAA	240
5	TAAATAGGGT AATAGATCTA TCGGTATATC TAAATGATCA TGCTCATTG ATAATCGAAT	300
	AGTAGTTGCA GAGTCATGTG GTTCGGAATG TTTGAAAAAT GGTGTCATAT TAATGACAAA	360
	TGAACCTTCT AACATGGCAC GTTTTTTATA TTTTATTTCT GAATTTAAAG TAGGCGGATT	420
10	AGTTTGTCCt TctAGGATAG CaCGATTCCa TTCaTGaTTA TCTTCAAAGT CGATTGGTTT	480
	TGAACCATCa AATACACCTT TTTCTAAATC TTCGATGCTA ACTTTTCTAT CATCGAAAAT	540
	CCAAGTCGTA CTATCTAATG TTATAGGAAA CTTTACGGCT CCTTTAATTT GTATCATTTT	600
15	CCCACTCCCT ATCAATGTAT ATAGCATTAT TTAAACACAA ATTGCTAACG ACACATTTTA	660
	AATCTACTTG CTTTTTAATA TTTAGTAAGA TAACTTTTA GTAAGACTTG AGAATTTATA	720
20	TAGAGGGGGA GCGTGTCTATG GCGAAACAAG CAACAATGAA AAATGCAGCT TTGAAACAA	779

(2) INFORMATION FOR SEQ ID NO: 1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1020:

	TTAATGGTCC ATTAAGAATA ATGGCAGAAA ACCGTTTGCA TAAATCAAAC CTTGATTCAC	60
	TAACCTAAGT AATACTCGCT TTTCnTAAAT CCTTTAGAAA GGAACATATnT ATCATGATTA	120
35	CTTCATTGAG ACATTCTGAA GATATAGATA AACATATTAT AAAAACACCA TTAGATCATA	180
	CAGCGTCATG GATTAATGTA GTAGAnCCAG ACCGAGAAGA AATTGAAAAT CTTATGGAAC	240
40	AATATAATAT ACCTGAAGAC TTTATACGTG ACCCTTTGGA CTCAGAAGAA AGTCCCGTA	300
	TTGAATATGA CGAAGATACT GGTACTCAT TAATCATTAT TGATTTACCT ATCGTCAATT	360
	CAACTAATCG TAGCGTTCTA TCTTTTGTA CGATTCCATT AGGCATTATT ATTGGCAACG	420
45	GTATTATCGT AACAGTTTGT GACGCTGAAA ATGAATTTTT AGAAAAATTA CCTAAGCGTG	480
	ATATTAATTT AAAATTTTAC AGCAGATTG CATTAGAAAT TTAACTACT ATTGCCGACC	540
	ATTATAATCG TAACCTACGA TTACTIONAATA AAAGTAGAAT TCGTATTGAG AAAGAACTAA	600
50	AAAATAACAT TACTAACAAA CAACTTTTCA AATTAATGGA AGTTGAAAAA AGTTTAGTAT	660
	ACTTTTTAGC TGCCTtAAAA GGTAACGATA CAATTATTAA AAAGTTATTC CGTTTACCTG	720

AAGCCATCGA AACAAACAGAA TTACATCAAC GTATCTTAGA AAGTATCACA ACATCATACG 840  
 CTTCTTATT ATCTAATGAT ATGAATACGA TTATGAAGAC ATTAACACTT TTCACGGTAC 900  
 5 TATTAACgTT ACCAAyActC GTATTTAGTT TCTTCGGTAT GAATGTGTCTG 950

## (2) INFORMATION FOR SEQ ID NO: 1021:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1021:

AATATATAAA ATGAATACAT TGTGAGGCAA TTATCAAATG AAATTTAATA AAGTAAAACT 60  
 20 AGTTATACAT GCGTGTGTAC TATTATTTAT CATTATTTCT ATAGCGTTAA TTTTTCATCG 120  
 ATTACAGACG AAGACACATT CTATAGACCC AATACATAAG GAAACAAAAT TATCAGACAA 180  
 TGAAAAATAT TTAGTGGATC GTAATAAGGA AAAGGTTGCG CCGTCTAAAC TAAAAGAGGT 240  
 25 ATATAATAGC AAGGATCCTA AATATAAGAA AATTGACAAG TATTTACAAA GTTCATTATT 300  
 TAACGGTTCA GTAGCTATAT ATGAAAATGG CAAATTGAAA aTGAGTAAaG GTtATGGaTA 360  
 TCAAGaTTTT GAAAAAGGTa TTAAAAaCAC ACCGaaTACG aTGTTTTtAA TnGGTTCAGC 420  
 30 TCAAAAATTT TCAACAGGGT TACTGTtAAA ACAGTTAGAA GAAGAACATA AAATAAATAT 480  
 CAATGATCCA GTAAGTAAAT ACCTTCCATG GTTTAAAACA TCTAAGCC 528

## (2) INFORMATION FOR SEQ ID NO: 1022:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1022:

GCATTnCGGT TAAAgTAKGt TTCAGCTTCT CTCaTTTTAG AAGTACCGaA AAtTGGTTGG 60  
 TTAtCTGGAT TTAATrCAC GATAAATATT GCTTACTTTG TTACTTTGTt AAATGTACCC 120  
 ATTACGAGTC TCAATGTTAT TCCAATAAAT ATCACTTGTT GGTGCATGGT TTGGATATGC 180  
 50 ACAATGATTT CTTGAAATTG TTTGAACGAT TTCTAATGGA TCACAGCCAA ATGTACTGTT 240  
 TAATACTTCA GAGTCTCTGA ATAATGCACA AAnTGAAATA CAAGTTGTCC AGTTTGGTAA 300

AGTATCTTGC GTATAACCAG CCTCTATACG AACCATTTTA AATTTTGTTT GAATTAAATC 420  
 TGTAAAACTC TGTCTATCCA TTCTGTTATC TACCTTTCTG TTTGGGGAAT TTTATCCGGA 480  
 5 CACAAGAAAT TGCAATAATA CACATTTCTT GAAACACAGA TTACATCTTA ATATATTTTT 540  
 AATAAAATGA AAAGAGTCAA TTTACATTT GTATTAAATT TTGATCAAGT CAACAAGAGT 600  
 TAAGTTTACT TTATAATGAA GCGAAAGTAA ATGAAGTAAA ATTTTATGCA TAATCACTAG 660  
 10 ATTTGATAAA ACTTACACTT TTATAATGaT ATCAAATTTA CAAaGGAAAA CTG 713

(2) INFORMATION FOR SEQ ID NO: 1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1023:

AATAAAATAG AAATGATTAT GGGTACAATT ATCGCTATCA TATCCTTGTT ATTAATTATA 60  
 25 TTACAAGCAT TTAATATTAC TTGGGGCGTT ATACCAATTA CAAATTTTGG ACATCAATTT 120  
 TTCTTTTTTCA TTGGTATTAT TTTAGTAATT GCCGGCATAT TTTwyAAGCG ACTtGAGTTT 180  
 TCGGGaATcG GGTATTATT TTGTcAAAAA ACCGTCGATG CAATGATTCA TAATCCACAA 240  
 30 TCAGCCCAGA TTTTTCATT AATTATATGG ATATTATTAG TAGTTCTAGT TATATATTTT 300  
 ACAATTAGAT TATCTTCACG TACAAGATTA TAAATATGAT AAAACTATTC ACTTGaTTAA 360  
 TTGTATTAAT TGaGATGaAT AGTTTTTTTA TTGTTGGAAT AACTTTTGGT AATTTATAAA 420  
 35 TAATTTAAAA AAATTGTTTA TAAAAGGAAG CGTATATAGA ATGAAGGTTG GGTATATAGT 480  
 TTATTGAGGG AGGTGTCACA ATGAATAAAG TCACAaTTAA TCCTCAAATC CAATTAACCT 540  
 40 ATCAAATTGA AGGTAAAGGG GATCCTATAn 570

(2) INFORMATION FOR SEQ ID NO: 1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1024:

CTTGTGTGTG CTTGAGCATT ATTAAAAAGA GTATTTAAAT TTAGTTGTTG GTTTGTAATA 60

TCAGAATTAT TAACACTATA TTTCCCTTTA AATAATGGTG ATTCGTAATA ATGCTTATCT 180  
 TTATCTGCAG CTAACCTGGAA TTKCCCTAAT GCAGAGTCTG CGATTGTTGG TTCAAGATTA 240  
 5 ATCATTGATT TCTCTTTTTT AGGATCATGT CCATATGACA tGTaATTTTC GATGCATTAA 300  
 CAACAGATTT AKGAATGCCA AGCCCTTTAA CAATTTTCATC TGATGCATCT GCGCTTAATn 360  
 CTAATGAAGA TAAAAACGAt TAAtCTTTTCAT CkkTTCTTGG AACTTCACTT CATTTTCAAA 420  
 10 ACGGTCATTA AAATAATCTT TATACATTTT TGCTGTTTGT TGTTCACTTT TTAGGTATGT 480  
 ATTTTTC 487

(2) INFORMATION FOR SEQ ID NO: 1025:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 364 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1025:

25 ATATGTTATA AACAATTTTA CAGTTGTATC ATCTACTCGT TCTATTCTCA TATCATCTCA 60  
 CTCCTTACAG TCGATGAATA GTATCCACAT TGTATTAAAG CATCAAACAA AATACAATTT 120  
 ATTTGTTTGA TTTCTTTCTC TAAAmTATTT TGGTAACTTA TAATAACATA TTCGTTGTAG 180  
 30 CAAAACTATT TAAATGATTT ATACAGTTAA AGCATTAAAG CACTTTCTTA ATTTAATTTT 240  
 ACCTTATCAT AGCAAATGTT TCATCCAAAA CACTCTAATA TAGAGCTATA TTAACAATTG 300  
 CACATTTGaT TTAAAAGATA CTAAGCAATT ATTGtAAAAT TAAAACCAAA AAaGCAACAC 360  
 35 TATA 364

(2) INFORMATION FOR SEQ ID NO: 1026:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1026:

50 TGCCCCAGGG GAGTAcnAAA AAAAAGnGGG GTGGGGAATT GGAAACCGGA ATTAGTGGTT 60  
 AAAGGGGTTT ATTGGATGTT GGGTCTAAAG TATTCCAGA AATTTATCCA TcNATGATTG 120  
 CTTTAGCCAA GTTTTTTTCC AACCCATCTT TATGGAATTT AGTTATCTCA ATTACATTAA 180

CTTATATAAA AATGGCACAA TTATTTTCATG TACCAACAAG AACAAATATTA ATACGTCATT 300  
 TAACACCTAA AATTATACCG GCTATTATCG TTG 333

(2) INFORMATION FOR SEQ ID NO: 1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1027:

TGTTCCATTC GTTTTAATAA TGGTGATACT GTACCAGTAT CGAGTGCTAA TTCAGTTACG 60  
 ACTTCTTGA CGTTTACAGG AGATTCATCC CATAAAATTG TTAAGACAAG AAATTGTGGG 120  
 TATGTTAGAT TGTACTTCTT AAAAAGTTG TTAGAGTAGT AGCGATTAAC TTGTCTTTGA 180  
 GCATTGTACA AACTAAAGCA TAGCTGTTCT TTAAATTAT GTTGATCAGA CATTAAAGTT 240  
 CTCCTCCAGA CATACTATCC GTTTTnTCT CTTTTCGGAT TGGTAATCAT TAAAAAGTTG 300  
 ATTGTTTATT AATTCACAAC TTTCTTTGAT TCAATGCCAT GcAAAAATTA AAGTATGTTT 360  
 AAAGTTTAGA AGATATTTTT GATTAAATCA AGCAAAAAGA TAATTTAATA TATATGTGAT 420  
 CATTTTTAAA AATAACTGTn ATAGAAAAGA 450

(2) INFORMATION FOR SEQ ID NO: 1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1028:

TGCATCTATA CCTAGAACTT TAATTTTCGGA TTTTATTGCG TCTGTAATAT CTTTAATACC 60  
 ACTTTTCGATA GGGAAACTTT CGTCACCTTC AACATATTTA ATACCAAAGC CACCACCAAG 120  
 GTTTAATAAT TCAACTTGAA TGCCTTGctC TTTaAGCCAA CGTAAAmCAA TTTTAGCaGT 180  
 TTCAATAAAat GCTTCTGTAC CTTCAAtCTG TGrACCaATA TGACAATGTA CACCTTTTAA 240  
 TTTTAAGTGT TTAGATTGTT GGACTTTGTC AATTGCTTTT TTAGCTAAGC CATATTGaAT 300  
 TGaTAATCCA AACTTACTAT CTTCTTGCCC AGTTTGaATA AATTCgTGTG TATGTGCTTC 360  
 aACACCTGGa TTAACCTGTA AtACAACCTG aACCGTATCA TTAGCATAGC GGTCTATTAA 420



AATTTTCATGT TTCGTTTTAT TGTTACCATG GAAATGGATG CGACTCGGTT CAAAA

535

(2) INFORMATION FOR SEQ ID NO: 1029:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 359 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1029:

GAAGATGATT GAATTATGGA ATTTTTTTTCG AGATATGTTA TTTCGGGGAT CAGATTTTGC	60
GATTTTGCCT TGGATAGAGT AGTTGCGATT TGTAATACG TTTTTCAGGT TCGATTCAAT	120
TTCGTTGTGA AGATAATATG GATTAGTTTC ACTGACATGT TGATGCATGT CTTTTTTGTT	180
CTGATAAAGT ATAAAATGTT TACTTAACAT TACTTAGTAT GACACCTGCT AATTCAAACA	240
TTATTTGAGA CATTCTTTTC AAATTAATTA TAAATTTTTC CcATAGACT AGTTTGATAT	300
TTATCTACAT CTCAAATTC TCATCAACAA TCTGTCACAT CCAACATTTT TACTThAGT	359

(2) INFORMATION FOR SEQ ID NO: 1030:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 341 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1030:

TACATTGGTA AATAATTCTC ATAGTTTATG TCTCGTTGAT TAATCCAATC ATTGTTTTTA	60
TCGGGTAAAA CATTCAAAC TTTCAAATTC ACAATTGATT GATGTTTCAT TAAAGTATCT	120
AATTTTTGCT CTCTAGTTAA ATATTCACCA ATGTCATTAT AATAGATATC GTGATTGTAA	180
CTTCCATCTT TAACTAAAAT AGATATAGCT ATCGGTGCTC TACTTCCTGA TCCAAATATT	240
TTTCCACCTT CTTTTCTGg TTTTTCACCC TGTGTTGTT GGTGCTCTCT CAAATTAATT	300
ATGtACAGaT AGTTAAATTC ATCGaTAAAA CTTTTCTAAA T	341

(2) INFORMATION FOR SEQ ID NO: 1031:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1031:

GTCTAACTTT AATGTTTAAA AAnCTTAGAA ATTTTCTACT CATAAATGGA TGCTTTATGG 60  
 5 AATATTATTA ACAGGCCAG CTTCAATGCT AGCTATAGAA TTTGGATGGT TCTTAACAGA 120  
 GATGGGTAGA CAGCCTTGA TTGTTCGTGG TTATATGCGC GTGGCAGAAG CAGCAACACA 180  
 GCAGCGGAAT AACCTTCGTT ACAATTTTAT TTGGCATATG TACATCATTT AAGTATACAG 240  
 10 TGCAACGTAT ATCGTAGTTA AAATAACCGC GTAGAGAGTA ACGTAGCAGA GCAGAGGAAT 300  
 GAAAnATTAG CTTATGnAAC GGTAGG 326

## (2) INFORMATION FOR SEQ ID NO: 1032:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1032:

ACAATCAGGC TTGTGAAGAA TGAATTGCAT GACGTTTGTG TAATTGAACT GCGAGGTTTA 60  
 ATTTCTAAAA TGCTCCAGnC CTCCAATGTA ATCGCATCTT GATATAACAT AGCGATCGCT 120  
 TGATTTGTCTG TTGTATCAAC ACCTCTAAAC AACGTTTCAC CTATTCGGCA ATTCATTTAT 180  
 30 TTTACCCAAA TCATTATATA AAAGTTGTGG TAACATGCTC GAAATACCAC CTGAAATAAT 240  
 nTCAATCGAT ATCCTATTTT TCT 263

## (2) INFORMATION FOR SEQ ID NO: 1033:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1033:

TTTCTATAGA GGATCCTGTA GAGATGCAAA TTCCTGGTAT CGTCCAAATT AATGTGAATG 60  
 ATAAAGCTGG CATAAACTAT GTAAATTCGT TTAAAGCTAT TTTAAGATGT GATCCTGATG 120  
 TTATTTTAAT AGGTGAAATC AGAGATAAAG ATGTTGCCAA GTGTGTTATA CAGGCTAGTT 180  
 50 TAAGTGGTCA CCTTGTTCTG ACTACATTGC ATGCAACTGA TTGTAAAGGT GCTATTTTAA 240  
 GGCTATTAGA AATGGGCATT TCTGTACAAG AATTGATACA GGCAACTAAC TTAATTATAA 300

AGCAACAACCT CCGATATTTTC TTTTCCCaTA ATCATTtCATT ACCATCATCA TTtAAGAACCT 420  
 TAGAAGATAA ACTTGATGAT ATGACAAAAG CAGGTGTCAT TTGTGAAACT ACAATGCATA 480  
 5 AATACATTTA AACTACATTC TAAGAAGCGA CAAT 514

(2) INFORMATION FOR SEQ ID NO: 1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1034:

TTTTTCACGA ACATTTTTTGT TTAAATTTT CTTTCTTAAA CGTATACTTT CTGGTGTAAC 60  
 20 CTCAACAAGT TCATCATCAT TAATGAATTG TAACGCTTCT TCCAATGTGA GAATACGCGG 120  
 TCTATTCATT GTTTGTGTTT GGTCTTTCGT TGCAGAACGT ACGTTAGTTT GATGTTTTGT 180  
 TTTAGTGATG TTAACAGTTA AATCATTTTC ACGATTATGT TCACCAACAA TCATACCTTC 240  
 25 ATAAACTTCA GTACCAGGTT CCATGAAGTT TACACCTCTA TCTTCAAGTC CCAAATGGc 300  
 ATAAGTACTT GCAGAACCTT GATCCATTGA AATTAATGCA CCATTACGAC GACCGCCAAT 360  
 TTGTGCTTTA ATACGTGGTC TAAATTCyTC aAATGTATGG TTAATAATAC CGTAACCTCT 420  
 30 TGTCATTGAC ATAAATTCAG TCGTATAACC AATCATACCA CGAGCCGGTA CATTAAAGAT 480  
 TAAACGTGTA AGTCCATTAT CAGTTGTAGT CaTATCAACC ATTTCACCTT TaCGTGcACC 540  
 35 TAAkGATTCa ATAACAGCAC CTGcATTTtC TTGTGGCACT TCACATTGCA CACGTTCA 598

(2) INFORMATION FOR SEQ ID NO: 1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1035:

AAACAGTGCT TCATTATCGG TATTGATATT GATCCACAAG CCGTTGACCT AGGGCGCACA 60  
 ATCGTAAACG TCTTAGCACC AAATGAAGAT ATAACAATTA CGGATCAAAA GGTATCTGAA 120  
 50 CTTAAAGATA TCAAAGATGT GACGCATATC ATATTCAGCT CGACAATTCC TTtAAGTACC 180  
 AGCATTTAGA AGGAATTATA TGAntTAACC AATGAAAATG TCCGTAGTGC CATGCGCCTT 240

AAGTGGGCCA TGT

313

## (2) INFORMATION FOR SEQ ID NO: 1036:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1036:

AATAATGAGT AGGTTTTGAT TACTTACGAG ATAACATGGT GAATTATTCT GAAGATAGAC 60  
 TAATGCGTCC ATTACATTTT GCAATCATTTG ATGAGGTTGA CTCAATTTTA AATCnACGAG 120  
 GnCGACGCCA TTAATTATTT CTGGTGAAC T GAAAAGTCAA CGTCACTTTA TACACAAGCA 180  
 AATGTTTTTG CGAAAATGTT AAAACAGGAC GAAGATTATA AATACGATGA AAAAC 235

## (2) INFORMATION FOR SEQ ID NO: 1037:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1037:

nCAATATACC TCCTATCATC ACACAAAATG CGTTGTTTCG TATGATTTTC TCAACATCGT 60  
 AGACTAATGC AATCAGACAC AACACCATGC TCTATATCCA ATATTTGCTT TATTGCCTAT 120  
 CAATGAGCGT ACTGCGTGCT TTAAATAAT CATCATCAAT TAATGACTGT ACAGGCACCT 180  
 CATGAAAATT ATCATCCGCC AAGTATTGCG CACGATCACT ATATGCTAAA TGCATCGCTT 240  
 GTATCATATG ATGCAAGTAA TCA 263

## (2) INFORMATION FOR SEQ ID NO: 1038:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1038:

ATTGTACCTG GCACAATCTC ATTATGTATT GGATTATCAT CATTACGAGC GCCAAATATT 60

ACCGTTATGA CATGTTGATC ATTTTnTAGTn AATGTTAAAG CTATAACGTG TGATATTGCG 180  
 AGTCTGTCGG CATTCAATAT CTTCnAAATG CCCTACAT 218

(2) INFORMATION FOR SEQ ID NO: 1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1039:

GTtTAGACGC TAATGnTGGC ATATATTACT TGCCATGCAA ATGAGTCATA AGGCATAGTT 60  
 TTCAAGAAGG GTTCTGACAA TGAAGTGAGC AACATGTCAT GATGAGAAGC AGGACTATAC 120  
 AATGAGAATA ACCTTTTnGAT TTTTCATGCA TAAGGCGATT CAATCAAAAG CAATCACCTT 180  
 CCAACTGAAT TGTCATTTTnG TAAAATAAAA TAATCGATCC AATCGTTATC TAATTCATAA 240  
 ATGTGTAAAC ACATACGTTA TGAATGGATA ACGATTTTTT GTTATGTTAA AGTGGTACAT 300  
 TAATCATGTA TTTCGTATGA TAATTAACGA CAAGTGTAAT GGTAAATGT ATTTTATGGA 360  
 TGGAAATGCh ATAATAGGCC TGGGTTACCA TGGnGC 396

(2) INFORMATION FOR SEQ ID NO: 1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1040:

AGCATTnTGT TAAAAGCTG ATGAAGCAAT AATAAACTCT TCATATCCTC TGTCATTAC 60  
 AATTGACCT TGATATACAA TTTCTTTAAA GTTTTCGATT TCTTTAAATT CTCTGCTATC 120  
 ATTTAAAATA GGTGCATTnG TAATAACATT CGCTTCCTTC TTATATCCTT TAGATTGATA 180  
 ATATTCTTTT GCTGCATGAC TTAAGTTTAC GAAGGCATTA ACACGATGTT TTAATATGTG 240  
 TTTTCTATA CTTTCTACAA ACTTTGAAAT AAGTGGAAT TTATTAATAA AGGCATTTTT 300  
 CGCATATATn TCATGCGCAT CATAAACAAT ATTAGCTTTT TtATAATTGC TTAAATAGAC 360  
 CATTAATAAT ACGTCGAAAT CATTTGCATG AATCACGTCA 400

(2) INFORMATION FOR SEQ ID NO: 1041:

(A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1041:

10 ACTTGCGTTT CTATTTAGCT CAGACAGGAA AAATATTCGC TGGAAATATG TAGGAATTTT 60  
 ACTTGCAATT CAGCTTATCT TTGCATTTAT CTTGCTTAAA ACTACAATGG GAATCAAGGT 120  
 TATTGGTGGT ATTTCAAACG GTTTTAACTA CTTATTATTA AAAGCAGCAG ATGGTGTTAA 180  
 15 CTTTGTATTC GGTGGTATTC AATATATCGT CCCTAAGCAC CCACCCATTC CTCCTCCGGG 240  
 GAATAATAAC CAACnGAATT AATTCCGn 268

(2) INFORMATION FOR SEQ ID NO: 1042:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1042:

30 GTGAAGATAA GAAATTAAAG TTAAGACAAG GTTAAAAATA AGCAAAAAAT ATTGAAATTA 60  
 CAGATCATTG GAnTGGTATT CCAGAGGAAG ATCAAGATTC ATTTTGTATC GCTTTTATCG 120  
 ATGGATTAAA TCTCGTTCAA GAAGTCAAGC GGTAATGGAC TCGATTATCT ATTGCTCAAA 180  
 35 AAATCATCAA TTAAACGGnG ATCGATTAAA ATTAAAGTGA ATTAACAAGG AGCAACGTTA 240  
 AATCTATTTT AATCAGACTG AGACGTCATC AAGTCAT 277

(2) INFORMATION FOR SEQ ID NO: 1043:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1043:

50 TTATCATCAC AAGTGATTTT GAAAATAAAA AAATCGAAGA TGATGACAAT GATTCAGGTA 60  
 GTGTGCCGAT ATTGCCGTTT ATTAAACGAG ACAAAGCATA TCAAATTATC CAGAATTTAG 120  
 TACCAGATTT ATCTTATCAA CAAGTTAATG AAGGTATGCC TTTGTCAGGn TTCCACAGAC 180

AACCATTATT ATTGTTATTA CCGATATAAC CATAGTCATA TGGTTATTGT GATCCAAGGT 300  
 ACCTTATGTC AACAGCGGGT TAAAGCAGAG ACAATACATC AGATTCCGCA TGAACGAAAT 360  
 5 TATATTTAA<sub>n</sub> GCT<sub>n</sub>CTAAG 379

## (2) INFORMATION FOR SEQ ID NO: 1044:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1044:

ATATTGAACT TGAAGACCAT GCAGATATAA ATGAAATAAC ATATCGATTA TCAAAAATTT 60  
 20 TCGGTATTAA ATCTATTAGT CCAGTATTAA AAGTAGAAAA AACAATAGAG GCAATAAGTG 120  
 CAGGGACAAT TAAATTTGCG CCATT<sub>n</sub>TGAA GAAAACAGCA CATT<sub>n</sub>TAAAT TGATGTGAAG 180  
 CGTGCCGATA AAAATTTCCC AATGGATACG TATGAATTAC AGCGTGAATT GGGTGGTGCA 240  
 25 GTATTGAAGC ACTTCGACAA TATTTCAAGT aATGTCaAAC GTCCAGATCA TGgAAATTCg 300  
 AGTGGGmAGT TtAGGmTTAG ATGCCAATTT TATATGGTAT G<sub>n</sub>AAGAAGTT GGTTCGGGG 360  
 30 TTCCAGGTGG GATTTAC<sub>n</sub>G TTGGGTACTG GTGGGT<sub>n</sub>AA 399

## (2) INFORMATION FOR SEQ ID NO: 1045:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1045:

AnGATAAACA GAGGAGCACA AAAATGAAT<sub>n</sub> nAAATATAAT CATCAAAAGT ATTGCGGCAT 60  
 45 TGACGATTTT AACATCAATA ACTGGTGTCG GCACAACAGT GGTTGATGGT ATTCAACAAA 120  
 CAGCCAAAGC AGAAAATAGT GTGAAATTAA TTACCAACAC GAATGTTGCA CCATACAGTG 180  
 GTGTTACATG GATGGGCGCT GGAACAGGAT TTGTAGTTGG GAATCATACA ATCATTACCA 240  
 50 ATAAACATGT TACTTATCAC A<sub>n</sub>GAAAGTCG GTGATGAAAT CAAAGCACAT CCTAATGGTT 300  
 TTTATAATAA CGGTGGTGGA CTTTATAAAG TTAATAAGAT TGTAGATTAT CCTGGTAAAG 360  
 AAGATATTGC GGTCGTACAA GTTGAAGAAA AATCAACGCA 400

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 626 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1046:

ATAAACTTCT ACACCATCAT CTTTACCTAC AACATTTGTA GCTTTAACTT TTAGTCCAAA 60  
 GTTATCTTTA AAGAATTGTT CACCTACTTT TTCAAATTCT TTACGATGCT TCTTCACAAA 120  
 TTCAATCGCA TCTTTTTCTG CAGGTGGTTG AAAGCCTTGT CCTACATATT TTGAAGCTTC 180  
 CATTTCTTCT GGTACTGATT TTGTTTCTGT ATTTGTTTCT GTATTTGTTT CTGTATTTGT 240  
 GTCTTTTTTT GATTCAATTAT TCATCGCTGA ACATCCTGAT AACAGTAGCG TTGCTATTAA 300  
 GATTAATTTT GCCTTTTTTAA ACATAGCTCA TCACCCATTT ATGTGKTTAT ATAGAATATT 360  
 AAAAAGCATT TTAAAAAAA TTTATTCATC TTTACGATAC ACTCCATATT CTATTGGATC 420  
 ATTATCATCA TAAAAGGCTT TTTTAGTATT AATAGTAGGC TTTCCTATTT GAATTGTAAT 480  
 TGTAGATTTT TCTGGCTTAT TTTTAAATTT ATATAGTTTA TCACTCAGTT CAATTACATC 540  
 ATCAACTGTA TTGTCTTTAG TAAAATTTTC CTTTGTACTA AACAATGTTG TTACTGTATC 600  
 TGTATTAGCA GCGnAATTCA CTTCTT 626

## (2) INFORMATION FOR SEQ ID NO: 1047:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1047:

GACGGCGTTC AAAATGCAAC GGTCAATTTA ACAACAGAGC AAGCTAAAGT TGACTATTAT 60  
 CCTGAAGAAA CAGATGCTGA TAACTTGTC ACTCGCATT C AAAAATTAGG TATGACGCGT 120  
 CTATTAAAGA TAACAATAAA GTCAACGTCA CGCAACTGAA GCGTACAACA TAAATTGATA 180  
 GATATCATAT CAGCAGTATA TCTTACCACT ATAATGTAAT GTTGACACTT TCATATGCAT 240  
 ATACAGACTA TTACGATCAT GTCCATTATT TAGCnCACTG TCATTATATG GTGGCATTAT 300  
 GAGGGTATAA ACTTAGn 317

## (2) INFORMATION FOR SEQ ID NO: 1048:



- (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1048:

10 ATACGnATTA TGCAAAAAAT AAAGTGAGAT TGGCATATGT GTAAATCTAA AATACTGTTG 60  
 AAAAATATTT TTAGTGAAGT AATCAGAAGT TAAAGATTTA ACTGAAGTAA AAATATAATC 120  
 AAGATTACGA GTCATTAACA TTTAGCTTTA AAGAGGGAAA CATATCAAAC TAGGTTAGCT 180  
 15 AAGnAAAACA CCGACTAAAT CGGGGATATT TCGTGACATG TTG 223

## (2) INFORMATION FOR SEQ ID NO: 1049:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 608 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1049:

AAATATGAAT AATGCAATTG ACCAACGTTT GATAACGTTG CCATACCCAT ATTAAATTTT 60  
 30 GTATAACCTT GTTCTTTACT CCAAAGTAAC ATATGCAAGT ATAGACCATC CATTAAATGGT 120  
 AAATCTAACT CTGGCAACCA TCTAATTAAA TCGACTGAAA TGGCATCATT AAAGTATGTT 180  
 GGCATTAAAC TACAAAATGC AATTACTTCA TTTTCTTCAT TTCGCATTAC ACCAATTGGC 240  
 35 GCTTTAGATA AGTATTCTTC ATTAAATnCA CCAACAGAGA AATGCATTTT CyGACGATTA 300  
 TCTAGCCaTA AATcACTTAC ATGTTGAAGt TCATTTAtAA ATTCAGTTGr AAACGGtGGt 360  
 TCAATAATTT CGAACGAAAT ATTAAGTTCA TCGAATThAT TTAAAGTCGC TCTAAATCCC 420  
 40 ACGGCGTTTT TTACCTGAAG TTGAAAATTG CGTTAAATCA ATAATTGCTT CTTACCTAA 480  
 TTTGAAAAAT TGGTTACCGG nATTATGATA TAAAGGCATG TGTTGATCTG TAACTTGATA 540  
 45 GAATATAACA TCATAGCCTA AATACTCAGC GTAATTATAG AATGCTTCTA ACAATTCATC 600  
 AAAGGCAT 608

## (2) INFORMATION FOR SEQ ID NO: 1050:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1050:

TGT TTTTCTA CGCTAAACTA TATGATAAAT TGCCTATGTA TTTACTGGTG TTTATGGCCT 60  
 5 TTACAGCTGT AATTTTGATT ATGATGTACA TACAAGAGAA AAATGAAAAT TACAAAGTTG 120  
 AAAAAAGATA TGTGGTTAGA TATCTCACAC TTAACGTTAT TGTGGGATAT ACTTTGCCAT 180  
 TGCTTTTGT ATCTATTTAC GTTTTGGTG TAGTCGGTTT TGGATTTGAT GTTTTCAATT 240  
 10 ATTGTCTAGG TaktATCTTG ATGtyATwTA TTTCTTGGTT TAGGtnTATT nT 292

## (2) INFORMATION FOR SEQ ID NO: 1051:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 734 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1051:

TAAATCnTCA AAGATTTCTT CTAAAACATT ATAATCTTCA ACGATACTCG AATAATAATA 60  
 25 CAGCTCATCA TTTCTGGGCT TGGTATAATA AAATATAACT TGCCACCTC CATCGTCCAC 120  
 ATATGCAATT ACATATACCT TTTCCCACTC TACTGGTATC ATTTCAATTGA TCTCATTTGC 180  
 AATTTTATTG TACATTTTAC TTAATTTTTC TTCGAAATTC ATGTTATCGC CTCTATTGTT 240  
 30 CAGCTTCTTC TTGCTCTTTA ACATATTGCT CGATTTCTTT AACTTTATTA ATTTCATATT 300  
 CCGTTTCTGG TAAAATTCCA AATTTTCTAT ACTTATAGTA ATTTTGTCGA CCTACTTGAC 360  
 CAAATTCTGA ATTTATCCAA TCAATATAAT CAAATGAAAC TTTTAATTCA CCTTCTCTTG 420  
 35 TAAAGTCAAA TTCGCATGAT GTCCATGGTT CATGTCCTTC TTCTTTAAAT AAATTCCTTA 480  
 AATTTTGAAA TTGTTTATAC AACTCATACA CTGAaTCCAT AAATTCCGAT TCCGATATAT 540  
 40 CATATTTATT TAATACACTA GTATAGTAGT ATAATTCATT ACTTCCAGGT TCTGTGTAAT 600  
 AGTAGAACAC TTCTCCTCCT CCGTCATCTA TATATGCCAT TGCATATACC TTTTCCCACT 660  
 CTACCGGTAT CATGCTGCTA ATCTTATTCG CAATCTCGCT ATACATTTCA CTTAATTTTT 720  
 45 CTTCGAAAGT CATG 734

## (2) INFORMATION FOR SEQ ID NO: 1052:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 775 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1052:

5 ATTTTTAACC AAAATTGCTT TTTTATCTGA AAAGAAAGGC AATGTTAATG TTTCTTCAAC 60  
 AATTGGTGCA ATCTCTGTTT CGTATAAATT ATATTTTACA AAGTTAAAGT CATCTCTATC 120  
 ACTTTTCAAA AATTGTGATA TGATTTCTGC ACTTTGTTTT TCAACCAATT CAGGCACATc 180  
 10 TCCATAAATa GCTACAATAT TGTCGCTCAT TCATTACACC CTTTCATTCTG TTTGACACAT 240  
 CAATAGATTA TATCATGTTT CTGTATCTAT AAACCACTTG CATTTCCATA AGAGCTTGAA 300  
 TCAACTTTTA AATTATCATC TAAGTCAATT GTAACCTGAC CGTTTtGTTG ACTATTGTAA 360  
 15 ATGCGtACTG CGAATCCTTT GCAATCGTTt aACAACCTTCT ATATTAGGaa GwTGATACAT 420  
 ATTGTTCTTC CCAGAAGAAA TCAAACCTTAT TTTAGGCTTA ATCATCTCTA TAAATTCTTT 480  
 AGAACTACTT GTCTTGCTCC CATGATGTCC TACTTTTAAA ATATCAATCT CCGGCAAGTT 540  
 20 ATATTTTTTTT AGTAGTAAAG ATTCATTATT TTTACTAGCA TCGCCCATTA ATAAACTTTT 600  
 TTTATTTTGA TATGTAATCA TAGTAATAAT CGAATACTCA TTTTATCTC GGCTATTTGG 660  
 AATAAACTA TCAAAAAAAT AGAAAACTAC TATCTCCAAG TTTAAACTA CTAACCTGTC 720  
 25 TTACATCCAT AAGTTTAATG GTTGTACTTA TGGGCTTAAT TTCCGATAAT AACCA 775

## (2) INFORMATION FOR SEQ ID NO: 1053:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1053:

40 GAGACCAATC ATCATAATGA ACGACAATCA TGTATTTAAT ATTTAATAAA ATACTGAATA 60  
 ATGCTATAAC TGCCATTAAT TGAAGACCAA TCGCATCTAA TCGGACAACA CGATCGGCAA 120  
 GTGATGGGCC TAGCACAACG CGAATGAGCA TAGCTAACAT AGGAnGTGAC AACTATGATT 180  
 AATGCAATAA CGATGAATAA CCTTGATGAn TCATTATAAT TCGCCACCT CTCT 234

## (2) INFORMATION FOR SEQ ID NO: 1054:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CTACTGGTAT CATCCACTGA TTTCATTTGC AATTTTCATTG TACATTTGAC TTAGCTTTTC 60  
 TTCGAAAGTC ATGTTATCGC CCCTATAGTT CAGCTTCATC TTGCTCTTTA ATATATTGCT 120  
 5 CGATTTCTTT AACTTCTTCC ATTTTCGTATT CCATTTCTGG TAAAACACCA AACTTTTTAT 180  
 ACATATAATA GTTTTCACGG CCTAATTGAT CAAACTCTGT ATTTATCCAA TCAATATAAT 240  
 CAAATGAAAC TTTTAATTTA CCTTCGCTTG TAAAGTCAAA TTCACTTGAT GTCCATGGTT 300  
 10 CAAGCCCTTC TTCTTTAgAA AGTTTCTCTT AACTTCTTAA ACAATCTATA TAAATCCGTC 360  
 CACAAATCAT AAAATACTTT TTCAGAGACA TTATACTCTC 400

(2) INFORMATION FOR SEQ ID NO: 1055:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1055:

GnGGCATATA TAGCGTTGGC GGTATAACAA AGAAAAATGT GAGATCAGTG TTTGGATTTG 60  
 TAAGTAATCC AAGTCTACAA GTTAAAAAAG TTGATGCTAA AAATGGCTTT TCGATAAACG 120  
 AGTTGTTTTT TATTCAAAAG GAAGAAGTAT CATTGAAGGA ACTGnACTTT AAAATAAGAA 180  
 30 AACTCTTAAT CGAAAAATAT AGATTGTATA AAGGAACGTC TGATAAAGGT AGAATTGTTA 240  
 TCAATATGAA AGACGAAAAG AAGCATGAAA TTGATTTAAG TGAAAAATTA AGTTTTGAAC 300  
 GTATGTTTGa TGTAATGGaT AGTAAGCAAA TTA 333

(2) INFORMATION FOR SEQ ID NO: 1056:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 347 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1056:

TGGGCAGTTA CATTTATGAT TATCAGCACA TGTTTAGCTT ATAAATTTTT ACGAAAGTTT 60  
 AGCCGTTTAT AAAGCACATG CATAATGAAA CGAGTATTG CCACTTGATT AGTACTTCAT 120  
 50 TATTATGTCG AAAATAAAAA TAAGTGGTAT TTTTAATATA TTAAGAAGCA CTCATAATCG 180  
 GCTGTTAATT AATAATATTT TTCATAAGTA TTGATTCATC ATTTTCTTTA TGTTAAATAT 240

TAATACAGAT ATCAATATGG CnAAAAGTGTT nnATGAATCA GAGGTAA

347

(2) INFORMATION FOR SEQ ID NO: 1057:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1057:

TCCAAAACGG AGAGCCAAGA GTTAACTCTA CTTATATAGG ATACGCGCCA ATTGATGATC 60  
 CAAAATTAGC GTTTTCAATT GTATATACAA ATCAGCCTGT ACCACCACCA TGGTTAACAG 120  
 GTGGAGACTT AGGTAGAGAT GTAATTA ACTACTTTTAA GCAGTTAGGT AAAGATGATA 180  
 AAAATAAAGA CAAAGACAAA TAAAATTTAA CCTGACGATT GTGTAGCGCA TGGTTGTAAA 240  
 ATTTTAACTT TGCmAATATT ATAGATGTTG GTATAATAAT AAAGTCGTAT TtAGaAATGA 300  
 TwAGGaGGGA AT 312

(2) INFORMATION FOR SEQ ID NO: 1058:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1058:

GCCATTTTGC GATGCTAAAT CCATTGAAAA TGCAATACCT GAAAGTCCAC CAAACAAAGA 60  
 ATTGTTATAT TGACCACTCT GTAAATATGG TGCTAATTTC ATGATGTACT TATGCACAAT 120  
 TTGCTCAGTA TTAATATCGA AAACCTTTtG AtAAGCATCT AAAACAAAA TGATACCTGG 180  
 TATACCATGT GATAAAGTTG AAGGTTCAAA ATAATCGGTT TCAGTAGATG CTTTTGAAAT 240  
 GAAATCATCT ACTTCTGAAA TCTCTTGAAA CTTCTTCTTC AATATTAGAT TCATATCAAT 300  
 CATTTTTtGTC ACCACACCAA TGCTTTTGAG TTTTAACAAT TTCTTTTACA ATAGATAAAA 360  
 CAAATGTTTC TTGATCCTTA TCAATGCCAA ATATTCGATT GnAG 404

(2) INFORMATION FOR SEQ ID NO: 1059:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1059:

5 ATGTACATAG GnATGACATA AGTGTGCCTT CTTTTTCAAG ACCCTCCATA GAAATAATAC 60  
 ATGGATGTGC ACCACGnTAC TACCTCTTTA ACGTTACCAG AATTGATAAA TTAACTTTCT 120  
 CTTGTGTTGC TAAACCTACA ACTGGTGTAC CTTCTTCGAT TAAGGCAATT GTACCATGTT 180  
 10 TAAGTTCTCC ACCAGCAAAA CCTCGCTGAA TGTAAGAAATT CTTAAGTTTA AGT 233

## (2) INFORMATION FOR SEQ ID NO: 1060:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 295 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1060:

20 GCACCACTAC TGTTAATAAC ACACCTAAAA AAGTCGAAAT ATAAGGGTTA ATCGCTGTTT 60  
 TAAATGTATA TCCTAGTGCG ATTGCCATTA ATTATCCGAT AGCTTTTTTCT GCTGCTTCCA 120  
 25 TAGTCATCTC ACCTAATGTT GGATGTGCAT GGATTGTTAA TGCGATATCT TCAGCATTCA 180  
 TACCAGCTTC AATTGCTAAA CCTAATTCAG AGATAATATC TGATGCACCA GTACCAACTA 240  
 30 CTTGAGCACC GATTAAAGTA TCATCTTCTT TAGTGTAATA AGTTTAACAA ATCCG 295

## (2) INFORMATION FOR SEQ ID NO: 1061:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 413 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1061:

40 CAATGCCTCT CGTGTTCAG CTTCTTCCGG TGAAAAACCA ATATTTTCAA GTGCAATAAT 60  
 TTGATCTAAG TCCTGCATGA TTAATTTTCT TAATACCATA AAAACACTTC CTTAGCCCTA 120  
 45 TATATCAAAA GTAATACCTT CATCTTTATA TTCATTATTT TCAAACTACC TCACTATAA 180  
 AAAACGAGTC TTTTATTGA AAGCCATTCG CCTTAATCAA TTAGACAAGT TGTATKATAC 240  
 50 GAATTAGTAA ATAATCATGA TTATAATTCA TTTAAGCAT ACTCAAAAAG ACTGGTACAT 300  
 GTATACCAAGT CTAATTCGAA AAAATATATT TAGTTAAAAC CATTTCAAAA ACGACTTCAC 360

## (2) INFORMATION FOR SEQ ID NO: 1062:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1062:

```

AAGCTGCATA CTCTCCAAAC TTAGAACCAC CGAAGCGATT CACAAAATAT TTATTAGCTA      60
AAAAGTCGGC ACATAAAATT AATATTGTGA GCAATGCCAT AGATACATAA AACACCCATG      120
ATAAATGCTG ATTATGAAAG CCAAATTGAT AGATTAAAAA GCCAACCCAT AATACTAAAA      180
CAGAAGGAAT AATCGGCTTA ATCAACCCAA CAAATGCTAA CATGAAGGCA GCGATGATAA      240
GTAGCCATAA AATAATTGTC ATGTTGATAT CACATCCTCT TTTGTATTTT TTGATTTTAA      300
GTAAAGAATA TAAGTATCAT ACCTAACATG GTTGATGCTG CTGGATACCA AAAnATACAT      360
TTTCCCAAAC CTTACCCAGT GGACTCCTAG GCACCACCTT      400

```

## (2) INFORMATION FOR SEQ ID NO: 1063:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1063:

```

TGGATCAGAA GGAATCTGGA TGCCTATTGA TGACAAAGGA TACTTTAATT TTGACTTCAA      60
AACGAAACGT TTCGATGATT TAGAGTTAAA GAAAAATGAT GAGATCTCAT TAACATTTCG      120
ACCTGATGAC GAAGATGAGG CATTGAAGTC ATTAATTTTC AAAACTAAGG TAACGAGTTT      180
AGAAGATATT GATAAAGCAG AACTAAATA TGACCATACT AAAGTGGAAA AAGTAAAAGT      240
ATTGAAAGAT GTTAAAGAAG ATTTACATGT AGATGAAATT TACGGAAGCT TATATCATAC      300
AGAAAAAGGT AAAGGTATTC TTGATAAAGA AGGTACTAAA GTaATTaAAG GTAAGACTAA      360
ATTCGCAAAT GCAGTTGTGA AGGTAGACTC TGAAGTAGGT      400

```

## (2) INFORMATION FOR SEQ ID NO: 1064:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 434 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1064:

5 GTGGTCGTGA AGCAACTGAT TTCAAAGAAG AAGATATCGA GCTTTTCAAA GACATTGCCG 60  
 ACAAAGTAAA ACAAACAAAT AGTTATGATC TAGCGTTTGA TGAATTAGAA AAAGAAAAAG 120  
 ACTTCCTGCA AGTCATTGTC AAAAACGATG ACAAAAACCTT ACCTACTAAT CAAAATGTCG 180  
 10 CTCAACTAGT AGAAGATTTA CGCCTAGAAA TCCAGAAAAT GCGCGAAGAA CGTCACCTAC 240  
 TTGGTCAAAT GATGAATCAA GTACATCAGC AACACAAGA ATTAAAAGAA CTTCAAAATC 300  
 AACTTACATC TAAATCGAT TCAAATAGCG AATCCTTAAA AGCCATCCAA ACATCACAAG 360  
 15 AGGCTATCCA AGAAGCGCAA GCCTCTCAAG CAAAAGCATT AGCTGAATCC ACCAATAAAG 420  
 TTGGAAAGAA TGCT 434

## (2) INFORMATION FOR SEQ ID NO: 1065:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1065:

30 TAAACATAT GGCTTGATAT TGCAGAAGAA TTGAAGTTAT CGTACCAGAA ACGGTACATA 60  
 ATCATGATTA TATGGAAACG AAAAAATAA AAATGGGTCA TTTAATATAG GAGGATTAA 120  
 CATTGAATTT TGAAGGTAAn TAATTGGAAA AGATTTGAAG TTGCATCGTT ATTATCGTTT 180  
 35 AATGATTTTA TCACTGGAAG ATTACTTGAA GGTGCAAAAG ATACnTTGAT TCGACATGA 239

## (2) INFORMATION FOR SEQ ID NO: 1066:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1066:

AAATATCTAT AGACCTTTAT TCGGAAATGG TTCGTCTCCA GAATGGAAGG ATGAAGTACC 60  
 50 GAGTATTGAA AGGTAGAAGG TCTCCAAACT TTACCTGnAC GTGCACGAnA TCTAACTGAA 120  
 GATGATTTAG CAATTGAATT GAAACAGCCA ATTGTGCGTT GTAATAACTT AGGAGAGTTA 180



## (2) INFORMATION FOR SEQ ID NO: 1067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 749 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1067:

CTACAATTCG ATCAACGCCG AAGTTAGATA CACCGATTGC TTTAATTTTA CCATTTTCTT 60  
 TTAACCTCTC TAATGCACGC CATGAGCCAT ATACGTCATT GTAAGGTTGG TGAATAAGCA 120  
 CTAGATCAAG ATAGTCCAAA TTTAATCGTT GTAATGATCG TTCGATTGAT TTGATAGTAT 180  
 CTTTCATAGTT AACATTTTCA ATCCATACTT TAGTCGTAAT GAATAGTTCA CTTCTATCAA 240  
 TACCTGAAGC TTCAATACCT TGACCTACTT CAGTTTCATT TAAATAACTT TGTGCTGTAT 300  
 CAATATGTCT ATAACCCGCT TTAATTGCTT CTTTAACCGC TTCTGCGTGT TGTTCCTGAG 360  
 GAATTGAAA TACTCCGAAA CCTAATACTG GTATCTTTAC ATCTTTACTT ATTTCAATAT 420  
 GATTCATAAA ATGAACCTCC TTTATCTtGT ATGTCCACTA TAAACCATGG AGCGAACTCT 480  
 ATAGCAAGCC ATAGGTTTAC TTTCTCTCCC AAAGACGTTT AACATTGTCA TCATAATTAT 540  
 CACTAGCATT GATTTTAGCA ATATGATTAT CATAATTATC AATTTTATAT TGTAGTAAAT 600  
 CTCTCGCATC ATGAATTGTC TTTAAGTTTT CATTTAATTC TTCGAGTTGC TTATTTAAAA 660  
 TTTGCTTTTG CTGTGCTTGA ATATTTTCAT TTTTAGGCAA nTGCGCTAAC CTGCAAAATT 720  
 CGATAAGCGA TTCAATACTG ACGCCTGCA 749

## (2) INFORMATION FOR SEQ ID NO: 1068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1068:

TCCTCGAGAT AGACAAGAAT GGTGGTACAA TGTTTTTTAT GACGATGGCA AATATnATAA 60  
 GAAnATAA11 AAGAATGACA TGTCAAAAAT TAGGCGTAAT TTTTAGATTT ATCTATATAT 120  
 TTATGCCACC GCTCAAACCT TTATnAAAAG TAAAAAGACA ATATTTATAT TGAACCTGTG 180  
 ACGTGAATTT CTAAACACA ACCAACAATC CACAAGGAAA CTAGTAAATA AGTTTAAATA 240

TACTGACTAA AAAGATTTTG AAAGTGATTA AGTATTTAAA ACACGCCAAT CTTAAACCGC 360  
 TATTGACAAA TATGAAGCGG AACCACCGTT GTnTTTCTTT TnCAGGTCCA ATTGAATAAA 420  
 5 TGTGATGAA TAGAAT 436

(2) INFORMATION FOR SEQ ID NO: 1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1069:

TTCTCAAGTA ACAGGTATTA TTGTTACTGG TACAATCAAT AGAGAAAAAT ATGGCATTAA 60  
 20 CTTTAACCAA GCACTTGAAA CTGGTGGCGT AATGCTAGGC AAAGATGTTA AATTCGAAGC 120  
 ATCAGCTGAA TTCTCAATCT CAGAATAATC TCATTACACA ATCCTCATTG TTTTAATATA 180  
 TATACGAAAT GCCAACTATA TCATCCCTAG GTATAGTTGG CATTTTTCGT TTAACTCATG 240  
 25 TGTAACAAGC ACTAACTGTT CACCCTAATT TTAGACGCCT TTCATTCAGG TAGGTCTTAT 300  
 TGAAACTGAA AACTTTGaTG ACCTTTTGcA AaGCCATTAA CTGTATAAAG CATAGATCCT 360  
 CCGCCCATTT CTATATCATT GGAACAAATG ATGAGTTGAT TTGTTCCAGG TATAAATTGC 420  
 30 GGATGAGTAG AACGTAACAT ATGCCCTTCA TCTCGGCCTG GTATCAATAT TTGTCCTATT 480  
 GGATAACCCC TTTTATTAAA AACTAACACT CGACCTGGA CCATACATTG CTACGGATAA 540  
 ATTATCGGCA C 551

(2) INFORMATION FOR SEQ ID NO: 1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1070:

TATnATGGTA ACGCATGAnC CTGTTGCAGC ACGCTATGCA AATCGAGTAG TGATGCTAnA 60  
 AGATGGTCAA ATTTTCACTG AATTATACCA AGGGGATGAC GATAAACATA CCTTTTTCOA 120  
 50 AGAAATAATA CGTGTAACAA GTGTTTTAGG TGGCGTTAAT TATGACCTTT AACGAGATAA 180  
 TATTTAAAAA TTTCCGTCAA AATTTATCAC ATTATGCCAT CTATCTTTTT TCGTTAATTA 240

CAGAGTCATA TCCAATTATA CnGGC

325

## (2) INFORMATION FOR SEQ ID NO: 1071:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 771 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1071:

TAAATGCCGC AATTGGATAG CTTTAATATA ATTAATAGTC AAGGTATTnC CAACAAnAAT 60  
 ATATTATCCA CCCGAAGGAA GCGGGGTATn TTTGTTACTG ACGTCCCACA AGAAGCACAn 120  
 ATATTAGATA GTGCTTACTC TGAAATTAAA AAATTAAGAG ATTATGATGA AAAACTAATT 180  
 ATCCCAGGAT TTTTGGCGT ATCTCATGAA GGATATATAG TTACATTTCC ACGTGGCGGA 240  
 TCAGATATAA CTGGCGCCAT CATATCAAGT GGTGTTAGAG CCACAATTTA TGAAAATTTT 300  
 ACCGATGTGT CTGGTATTTA TAAAGCTAAT CCAAATATCA TCAAAGATCC TGAATTAATC 360  
 GAAGAAATCA CTTATCGAGA AATGCGTGAA TTATCTTATG CTGGTTTTAG TGTTTTCCAT 420  
 GATGAAGCCT TACAACCACT TTATAAAGAT CGCATCCCTG TGGTGATTAA AAATACGAAC 480  
 CGCCCTCAAG ATAAGGGTAC ATTTATAGTG CATGATAGAG AAATAAATGC GAAAAATGTG 540  
 ATTAGCGGTA TAAGTTGTGA TAAAGATTTT ACCGTTATTA ATATCAAAAA GTATTTAATG 600  
 AATAGACAAG TCGGCTTTAC TAGAAAGATA TTAGGTGTCT TAGAGGATAA TAATATTTCA 660  
 TTTGATCATA TGCCTTCAGG TATTGATACT ATCAGTATCG TTATGCGTTC AAAACAAATT 720  
 CAAAATAAAG AAACAAAAGT ATTAAATGAA ATTCGTCAAA AATGTGATGT T 771

## (2) INFORMATION FOR SEQ ID NO: 1072:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1072:

CGGTGGATCC GTTTGATCTT GAGTGAGGTG CCAATGAAAG TTATGAGCCA CGTTGTCGCG 60  
 CGCACCATAT CGTAGCACCT AGTGATAATA ATAAGGAGGA ATTATAAGTG TTTGATCAAT 120  
 TAGATATTGT AGAAGAAAGA TACGAACAGT TAAATGAACT GTTAATGACC CAGATGTTGn 180

## (2) INFORMATION FOR SEQ ID NO: 1073:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1073:

CTTCTTGGA GGGCGTTACA TCACCGGATG GATGATTATG AACTGCGATG ATTGCATTGG 60  
 CATTCTCTCT CACCGCAATA CTAAAAATTT CACGTGGATG TACAATCGAA CTATTTAATG 120  
 TACCTTTAAA AACACAGGTT TCTTTAATCA CTACATTTTT TGAATTTAAC AATAAAATGA 180  
 CAAAATGTTT TTGTGTTAAA TCTTTCATTG TTGGAATCAT ATAATCAGCA ACATCACTTG 240  
 GTTGCGTTAT TTKTATACGA TTATTTTCAG CTCTTCTCCC CATCCTTTCC CCTAACTCAA 300  
 ATGCTGCTTT TAAAGTAATT GCTTTTGTGA ATCCAATCCC TTAACTTTT ATCAAATCGT 360  
 TAATTGAAGA TTTTTCAT TCAATCAGAT TCGAAGCAGA TTTAAGCAGT TCATTACTAA 420  
 TGTCTATGCT CGAGAATCCT TTTCTTCCGG TGTTAATTAA TATAGCTAAT AATTCTGTAT 480  
 TCGAAAGACT TTTTGCACCA TGGCTTAACA AACGTTCTCT TGGCATTCTT GAAGTTACCA 540  
 TTTCTTTAAT TTTCAAAAAT ATACGCCTCC TAAAAATTGA TGGATATCAT TATAAAAAAG 600  
 TGAATTGATA AAAAAGGAR A TAAATATAAA TGAACAAGG GGTAATAGTT TAATCGGCTT 660  
 AAATATCATG GTAATTAAAG CAACTAAACC AGCAATGACA AATGTAAATA AATGACATA 720  
 AATAGTGAAT TGG 733

## (2) INFORMATION FOR SEQ ID NO: 1074:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 768 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1074:

ATGGTTATTT TTTATGCTCT AAATCGTATG TGTTTATAAG GTTCAATTTT TTGCCATTAT 60  
 TAATTTTGCC GAGCAGTAAT GGGTTGTTAA AGTATCCATC AATTATGCTT AGCAATATTG 120  
 AAAAATTTAA ATGAAAAGC GGTTCATTC TTGAAAATA GTGTATATTT ACATTTTGGT 180  
 AATAACTAAC TATAATTTAC ATAAGGAGGT TGTCATTTGG TAGTATTGTT ATCTTATAGT 240

TATTTACATA GAAGATCGAA ATGTGATTAT TGTAATTCGT CACTCAAaWG GTATGAATTA 360  
 ATGCCGATTA TTAGTTTTTT ATTATTAAAA GGGCGATGTC GAAACTGTCTG AAAGCGTATT 420  
 5 TCCCTAACAC ATTTCTTAGG GGAAACCTTT GCTTTAATAC CTATCGTCTT TATTAAGTAT 480  
 GATTTACAT ACGTAAATGt ACGCTATTTA TAACTACATA TGTTtTTCTG CTTATTTTTA 540  
 CTATGACCGA TATCACTTCT TTAATGTTAG ATTGTCGCTT AATTATAATT TATTGTATCG 600  
 10 TTTCTCTCTC GTTAAGTATG ATTTATCCAG TAGCTTTTAT CATTATTAGT ATGACCACGC 660  
 ATATATTCTA CTTTTTATTT CGGGCATATA TTGGTTATGG TGACGTTTTA CTAATATCTG 720  
 15 CACTTTCTTT GTTTTTCCCC TCTCCAATTC ACTATTTATG TCATTTTA 768

## (2) INFORMATION FOR SEQ ID NO: 1075:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1075:

TCATATTCAT TAAAAATACC ATTCATCTCA GCTTTTCTCA TTTTCTCTT ATAAAGTTGT 60  
 ATTTCTGTGTC TTAATTCTGG CTCAGACATC TCACTCAATT TCTTCTGTTC CATCGGCAAT 120  
 30 ACCACTTTCT TCTAATTTAG CTTTAATTTT ATCATATTTA TATCCTTTTC TCATAAGGCC 180  
 TTCGATAGTT TTTGAAATTA ATTTCTGTTG CGTGTAATTC TTTCGATTTT TATTATAAAT 240  
 TTTTCTCTAAA TCTCGTTGTA ATAAATCGTC TAAAACCGCT TCATCTTGTG TAAAATCCAT 300  
 35 TTCATTCAAT ACAGCATGAA TGGTTTCCAT TTCAAACCCT TTTTGAATTA AAGATTGCAT 360  
 TACTTTTGCh TnAACTnTAT TTTGTGGCCC nTTTTTTGTT 400

## (2) INFORMATION FOR SEQ ID NO: 1076:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 753 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1076:

TTAGGTCAAA ATATGTTTTA TCCAAAAGGC ATTTTATCTC AATCTGCTGA AGCAAAGAGT 60  
 ACAACATATA ATGCAACTAT AGGTATGGCG ACAAACAAAG ACGGAAAAAT GTTTGCATCA 120

CAAGGCATCG AAGAATTACG TGATTTATGG CAACAAAAAA TGTTGCGTGA CAATCCAGAG 240  
 CTATCAATCG ACAACATGTC ACTACCAATT GTTACGAATG CATTACACA TGGTTTATCT 300  
 5 TTAGTTGGCG ATTTATTTGT AAATCAAGGT GACACTATCT TGTTACCAGA GCATAATTGG 360  
 GGTAATTACA AACTTGTTTT CAATACGAGA AATGGTGCAA ACCTTCAAAC ATATCCTATC 420  
 TTTGATAAAG ACGGGCATT TACTACTGAT TCACTTGTAG AAGCTTTACA ATCATACAAT 480  
 10 AAAGATAAAG TCATTATGAT TTAAATTAT CCTAATAaTC CGACAGGTTA CACACCTACG 540  
 CATAAAGAAG TGACTIONCAT CGTCGATGCA ATTAAAGCAT TAGCTGATAA AGGTACAAAA 600  
 GTTATAGCTG TTGTGGATGA CGCATACTAT GGTTTATTCT ATGAAGATGT GTATACTCAA 660  
 15 TCATTATTTA CTGCATTATC TAATTTAAAT TCAAATGCAA TATTACCTGT TCGTTTAGAT 720  
 GGTGCAACAA AAGAATTTTT CGCATGGGGA TTC 753

(2) INFORMATION FOR SEQ ID NO: 1077:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1077:

AGAAGCGATT TGACaATAAA ACAATTGAAA AACTTTTGGA AAGCAAGTGG TGGGAGAAAA 60  
 CGCCTGACAA ACTAAAAGGA TTTTCGGTTG AATATTTAAA TAAAAAGGAT ACTTAATGAT 120  
 35 ATGAGAATTT TAAATATTGT ATCGAGTAAT ATTGTTCAAG ACCCAAGGGT ACTTAAACAA 180  
 ATAGAAACAA TTAAAGGCGT TACGGATGAT TATAAAATTG TTGGAATGAA TAATTCACAA 240  
 rCTACTAATA AGCGATTGGA AAATTTAGAT TGTAATTATC GTTTGTTAGG TAGCAAGGTA 300  
 40 GATCCAAAAA ATATTCTTTC TAAATTAATT AAGCGTATAA GATTTGCaAC AGGTGtTATC 360  
 CGAGAAATTA AAGCTTATAA AcCTGACGTG AtTCATGCaA ATGAT 405

(2) INFORMATION FOR SEQ ID NO: 1078:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 504 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1078:

CATATTCACA CCTCAATATT CCATAACTTT TACTTTAATA TCAATCCACT TAAATCCATT 120  
 CACATCATTG AGTATAAAAT AATATGGTGA TATACGTTGA AGTTGATTAT CTTATATATA 180  
 5 AGTATACTTC ACAGAATTTA TAAAATTGTT TAGTCATCAT CTTCAGTGTT TAATTCAAAA 240  
 ATATAGAATC TACTGTATTG CATmATAaAT TGAAATGCCA CAAATTGTGC TCCAGCGATA 300  
 ACCAACATGC TCACAATAAT TATAAACTTA GATTCTACGA CATTAGGmAC CAeATATATT 360  
 10 CGATAATTTT TTCAATATAT ATAAATGAGC TCAACGCAGT TAATAATAAA CCGAAATGTG 420  
 TTTTAGTTTT ACCACCCCAA CGTTTTGTGA CTTTAGGTAA TTTTAATAAC GTGAACATTC 480  
 15 CGCCAATTAC TAATAACAAA TAAC 504

## (2) INFORMATION FOR SEQ ID NO: 1079:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 645 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1079:

CATTCTTAAT CAACTTCTTC ATAATGGGAA TTTGGCATGG TAnCGAAGTG TATTACATTG 60  
 TTTATGGTTT ATACCATGCA GCATTGTTTA TAGGTTATGG CTATTATGAA CGTTGGCGTA 120  
 30 AGAmACATCC GCCACGTTGG CAAAATGGTT TCACAACAGC ACTTAGCATT GTGATTACAT 180  
 TCCACTTTGT AACATTTGGC TTTTAAATCT TCTCAGGTAA ACTTATATAA TAAAGGAGAA 240  
 TTTAATTATG GAATTTAGAG AACAAAGTATT AAATTTATTA GCAGAAGTAG CAGAAAATGA 300  
 35 TATTGTAAAA GAAAATCCAG ACGTAGAAAT TTTTGAAGAA GGTATTATTG ATTCTTTCCa 360  
 AACAGTTGGA TTATTATTAG AGATTCAAAA TAACTTGaT ATCGAAGTAT CTATTATGGa 420  
 40 CTTTGaTAGA GATGAGTGGG caACACCAAA TAAAATCGTT GAAGCATTAG AAGAGTTACG 480  
 ATGAAATTAA AACCTTTTTT ACCCATTTTA ATTAGTGGAG CGGTATTCAT TGTCTTTCTA 540  
 TTATTACCTG CTAGTTGGTT TACAGGATTA GTAAATGAAA AGACTGTAGA AGATAATAGA 600  
 45 ACTTCATTGA CAGATCAAGT ACTAAAAGGC AACTCATTTC AAGAT 645

## (2) INFORMATION FOR SEQ ID NO: 1080:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1080:

5 AGATGCCAAA ATCAAAACCA ATAATTTGGC AACACATAT AAGTCCACTT TACCGGACCT 60  
 nTAAACTTAT CGTACTGTTA AGAACCAAAC GACTGCCATT ATTTGGTCCT AAAGCCACGA 120  
 TGGTGGTAGC CnTTGTAATA ATGCTGGCGT AGAAATTAAC CGCCACCCCT AACACCGAAC 180  
 10 TATAACGCGG ATAAACCAAT AAAATTATGA TATAATCATC CGTTAAGTCA ATCCATAGTT 240  
 TAACATCCCT TATGTTTAAAT TTA CTCT 267

## (2) INFORMATION FOR SEQ ID NO: 1081:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1081:

20 ATATTTGTCC ACTATTAGAA GATTGTAGAG AAGGACAAAA ACGTTATAAA GCTAGTTTGA 60  
 25 AAGAAGCGTG ATAACATGAC AAATATTACA AAAGAGGTAT TTGATAATTT AGAACAAGAG 120  
 ATTGATTTAT TTGCCAAAAA TAAGACATTA GGTTCCTAGTG AAGCAAAGCC CTACTTGGAT 180  
 30 GAATACCATA GTAAAATTAT TGATTATTTT AAGCAGGTTA ATGACATAAC TGGCAATATT 240  
 GATTTTGATA AATTAAATCA ATATCCTGTT GTGCCAATGA ATTTTAAAGA AAGATATGAT 300  
 TATATGATTG AACGTAAATA TCATTTTATG GGCTATCGAC AAATGAAGAC CTTTAAAACT 360  
 35 GAATTGATTA AAATGnATGC TAGTTATCAA ACAAGGTTAA AGAATAAGCA GGTATnGACA 420  
 AGATTGATCA TTTCTAGTG T 441

## (2) INFORMATION FOR SEQ ID NO: 1082:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1082:

50 AAAATTTCTT AGtTGATGGT TATTGTTGTT GATTTGAATA ATTTGTAGCG AATATTTTGT 60  
 AACAGGGCTA CTAAGAATTT TTATAACAAG AAGTGATTTC AATCGTACTA ATTTTCAGCG 120  
 TTTGATGACA AAAGTGATG TCCAACTTA AATAATGGCG ATAAAATTTA AGTCATGGGT 180



GTTGAATATC AATAAAAGAT TAGCAAGTTA GTTCAAAATG GCTATGTATT GTTTTTTGAA 300  
 ATACATAGGT TTGAAATCTA TATTAATTAT GCACCAAATA ATTTAATTAG ACTCTATCGA 360  
 5 AAATTTCCAA ATTTTGCTTA CTATCTTTCT AATTTTACTT TTATATTGTG 410

(2) INFORMATION FOR SEQ ID NO: 1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1083:

CAGATATTCC CTTCTATTTA CAAGTTGGTA ACCCATATTT ATCAGACAGC GTAGATAATC 60  
 20 ATACCGAAAA GTTGTTAGAA CGCTACGAGC AGTTGGTGGG TTTAGTTATG yAAAGTAATG 120  
 ATATGAATCA CGTTTATGTG TTACCACAAC TTCATACATT ACTTTGGAGC AATAAAAAAG 180  
 GTGTATAAAG GATAACTTAT TTTACTTTTT GCAAGTCATA TCTAATGAAT AACAATATAT 240  
 25 TAATTGATAT AATAGTTGAT TGAAGTATAA CGAACAGGAG TCCATCATGA TTGTATATAT 300  
 ATTAATTAAT ATTGCTATCG TCGTACTTAT AACTGGATTC AATTTATATA GGCATCAAAT 360  
 GCAACATTTA TCATTAAGTG CAATGTTGTt ATCTATTACG ATaAACGCCT TTATAAATAC 420  
 30 ATTCATAATT GATAAATATA ACTTTATTAC TCTGTGTACT ATAACGATGT TTATCATTTG 480  
 GACGATACTA CAGTTTTACA TTGATAAAAA ATTAAAACCT GTATACATTA CAGACCAAAA 540  
 ATTTATTGCT ATCATATTAA CGATTGTTGT CAGTTTAACG CAACGT 586  
 35

(2) INFORMATION FOR SEQ ID NO: 1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 638 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1084:

AACACAAGGT AGCGTCATTA GCATTTAGAT TTTATTGCCA AATTATATAA CGATTTATAC 60  
 ATCAATAAGA AAACAATAGA TGATGATCT GCAGTTCTG AAGTGAAATA TGATATTAAA 120  
 50 TCACAAATGA GTGATGATGA GATTAAGCGT TTAGAGGAAC AAGGACTTCA AGCTATTAAA 180  
 GAAGGACAAT TTGCAGTACT TTTGATGGCA GGTGGTCAAG GAACAAGACT TGGTTACAAG 240

TTAAAAACAT TGAATCATCA ATCTGGACAT ACGATTCAAT GGTATATTAT GACAAGTGAT 360  
 ATCAATCATG AAGAAACTTT AGCTTATTTT GAAGCACATA GTTATTTTGG ATATGATCAA 420  
 5 GAAGCAATCC ATTTCTTTAA ACAAGATAAT ATTGTGGCGC TTAGTGAAGA AGGGAAGTTA 480  
 ATTTTAAATC AACAGGGTCG TATTATGGAA ACGCCGAATG GTAATGGTGG CGTGTTTAAA 540  
 TCTTTAGACA AGGCAGGATA CTTAGAAGAA ATGTCTAATA ATGGCGTTAA GTCATATTTT 600  
 10 CTTGAATAAT CATCGACAAT GTTTTCAGTA ACATGTTG 638

(2) INFORMATION FOR SEQ ID NO: 1085:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 618 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1085:

ATTGCAATAT TATCCGCTTG GTTCAACACG TCATCTTTaT tAaTACcATT TATTGgAAaT 60  
 25 tCcACCcATT TCCcGGgCTt CTtACTTCCc TTTATAAAAC TGcCCATTTA ATGAATACTG 120  
 TTTAGCTTCA TCTATTcGTA CTTCCACTAG TTTACCAATC ATTTCTTTAG GCGCTTTGAA 180  
 ATTAAGTAGC TTATTTTTAT CAGTGTAGCC AGCAAGAACC TGATCATCTT TTTTACTACT 240  
 30 TCCTTCACAA AGTACTGTTA CAGTTTGTCC TTCGTACTTA CTcATAGCTA TTTGTGAATA 300  
 ATGACCAACT TTTTTATTCA AACGTTGCAA TCGTTCCTTT TTGACATTTA AAGGTACATT 360  
 ATCTTTCATT TTAGCAGCAG GCGTACCATC ACGTTGTGAA TACAAGTACG TATATGCATG 420  
 35 TTCAAAACCA ACTTCATCAT ACAGAGTTAA AGTTTCTTCA AATTGTTcCT CTGATTcATT 480  
 TGGATACCCT ACAATAATAT CTGTAGTTAA TGCTACATTA GGAATTCTAT CTTTGATTcG 540  
 40 TTTTACTAAA TCCAAATAAC TTTCTCGTGT ATATTTTCTA CCCATTATnT TTAATACTGC 600  
 ATTATTTCCA GATTGAAC 618

(2) INFORMATION FOR SEQ ID NO: 1086:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 502 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1086:

CAGCAATATC ATGATCAGTT TAATTCATCA AGAAAGTCTA TCTATACTTT TACAGAAACA 120  
 GTTCAACCAA ATCGTGTTAT TTATGATTTT TATGATTATG ATCCGTATCA ATTAGCAGCA 180  
 5 AATAATGCGA AAGCATTAAA GGATCATATT GAACAAACT TTAACTTTAA AGTCCAAAGT 240  
 ACCGGTGTTA KTTACTTTAG TGATGGTACA GTTAATATCA TTCAAGGTTT TGAAGAAAGA 300  
 GATAAATATG TTGATACAGT TTCAACAAAA TCTTCGTTAC GACGTATTAT TAGCGAACCA 360  
 10 nAGAGCTATC TAAACACCCT TTAAATAAAG AACAGGTTGA nCAAATCACA GCTATATTCA 420  
 AGTAAATCA AAGGCATAAT AATCCATTAC GCTCGATACG CACTATGGTT ATTATGCCTT 480  
 TAAATTATTT CTATATATAA nT 502

(2) INFORMATION FOR SEQ ID NO: 1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1087:

TTGCCTGATG GACGATGGCC ATCACAGACT GAGTTTAGAT TGTCTTTAAT GCAACAACCT 60  
 GCTGTAAACC AAATTACGAG TGGTAATGAA AGAATAAGTT CAGTTAATGG GCCACCAGGT 120  
 30 ACAGGTAAGA CTACTTTATT AAAAGATATA TTTGCTCATC TAGTAGTTGA mAGAGGTAA 180  
 GAGTTAGCTA AACTAAATAA TCCTAAAGAT GCATTTGTCA A<sub>1</sub>ACAAAAAT TCATGAAACG 240  
 GATGATAAAT ACGTATACTT ACTAAAGGAn nTATTGCCAA ATATAAGATG GTAGTCGCAT 300  
 35 CTAGTAATAA TGGAGCTGTT GAAATATAT CTAAAGATTT ACCGAAAATT GAAGAAATTA 360  
 TAAGAnATCC CGAAAAATGT AAATCCCTA AATATGAACA GAATTATGCA AATTTAGCAC 420  
 ATGAATTAA 429

(2) INFORMATION FOR SEQ ID NO: 1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1088:

TAAGACCTAA TATTTTGGnC CAATACTATG GTGCAGGTnA TTTATATATG ACACCAACAG 60

ATCCATTATT ACATGAGTTT GGTACGAAAA AGTATCCAGA TGAATATCGA TATGGTTTCT 180  
 ATGCTAAGCC AACATTGAAT AGACTTAACG GGGGATTCTT TGGACAAGTC TTTACTGTTT 240  
 5 ACTATAATGA TAAGTATGTA GTTGTACTTG CATTAAATGT AAAAGGAAAC AATGAAGTTC 300  
 GAATCAAACA TATTTATAAT GATATTTTAA AACAAAATAA ACCTTACAAT ACGAAGGGTG 360  
 TTATTGTTCA ATAATTAATA TAGAAGATAT AACATGTATA TGGCATTAAAG GCATCGACCT 420  
 10 TATCTGACCA GTATACGAGT TATATCTTCT TTTTATAGT GGTAAGGAGT TTAAAGTATA 480  
 AGGTTGAAGA AGGATGAGTT TAAAAATATG TGTAACTGA TAAAGGGGA nATCATTTGG 540  
 15 TGAGTTGGCA TCAGnCTAAA nTGAATGAAG ACGAATACGT TGGTCCATGC GTGGTGTGAn 600  
 TGTTTTCTAA A 611

## (2) INFORMATION FOR SEQ ID NO: 1089:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 644 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1089:

CTGGATAATC GCTTTAATAT GATCAATTTG CTTTTCACTC ATATTAAGCT TATCTAGCCC 60  
 30 TTTCAATTTTA TTCATACCTG GAATCATTTT CATAATATCA TCCAGTGGTC CTAGATTTTTT 120  
 CACCyGwTCA AGTTGTTCTA AAAAATCATC TAAAGTAAAC GATGACTCAC GCATCTTTTTT 180  
 CTCTAAATCT TTTGCTTTTTT CTTGATCCAC ATCTTGTTGC GCTTTTTTCAA TTAAACTTAA 240  
 35 CACATCACCC ATACCTAAAA TACGTGATGC CACACGTTCA GGATGGAATA GCTCTAAACC 300  
 ATCTAACTTT TCACTCATAC CAACAAATTT AATTGGTTTTT TGTGTCACCG AACGAATAGA 360  
 40 TAAAGCTGcA CCACCACGTG tATCACCATC TAATTTAGTT AAGGtAACAC CTGTGACATC 420  
 AAGTTGATCG TCAAAAGATT CTGCAACATT GACAGCATCT TGACCCGTCA TTGAATCGAC 480  
 AACTAACATA ATTTCGTTTG GTTTAGCAAT GTCTTTTACT TCTTTTAATT CGTTCATCAA 540  
 45 TGCTTCATCG ATGTGTAATC GACCTGCTGG TATCAATGGA TTACAAAGTC TAAATGTTCT 600  
 TCTTTAGCAn GTTTTAATGC ATTAGTTACA ATTTGGTGTG GGCC 644

## (2) INFORMATION FOR SEQ ID NO: 1090:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1090:

5 GATCCTATCG TTTTAGTGCA TGGTTTCAAT GGGTTTACAG ATGATATTAA TCCTTCAGTG 60  
 TTAAGTCATT ATTAGGGCGG TAATAAAATG AACATTCGCC AAGATTTAGA AAAAATGGTT 120  
 ACAAAGCTAT GAAGCAAGTA TAAGTGCTTT TGGAAGTAAC TATGACCGCG CATTGAACTT 180  
 10 TATTATTATA TCAAAGGCnG TCGnGTA 207

## (2) INFORMATION FOR SEQ ID NO: 1091:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1091:

20 GACTCTAGAG GATCCCCGCT CAAATGCCAT TTGGTGATAT TCGTGAAGCT GCTGGCGAAA 60  
 AAACATTTAA TCCAGTGGA GATCGTTTCG TAATAAAAAA ATAATCAATA TATTGTTAGG 120  
 25 AATGGGACAG AAATGATAAA GATTCATTAG TTATTCATTA TGTGTAGTT CTTACACATT 180  
 AGCCGCTGCT AATnGCAACT TAAGAnTAGG TT 212

## (2) INFORMATION FOR SEQ ID NO: 1092:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1092:

40 TGGACCTGCA ATTGGTTGCC AGCAGCAACT TTAGCTTCAT AGCTAGCTTT GTGAGCAAGT 60  
 GGTAACCTG GAACGATATC ACCAATTGCA TAGATATTGC TGATAGACGT ACGGCTTTGT 120  
 TTATCAACnn CTAATAATCC ACGTCAGCGA ATTTAACACC TAATTCTTCT AGGCCTAATT 180  
 45 CGTCGTGTTT GGACGACGAC CTACATTA 208

## (2) INFORMATION FOR SEQ ID NO: 1093:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 902 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double
- 55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1093:

5 CTTAAAAGTT GTnTCAATAA TGATTGTATT AGTTGCATGC TTATTATATA TGAATCATAG 60  
 TATTGATTTA CCTACCCTTA TTATGATTTT AATTTTTTCA TTTGTGATAT TTGATAGTGT 120  
 TGAAAATATT AATAGTGCTG CACACGTACT TGAAATGATA GATATGACGA TAGATGATAT 180  
 10 TGmAAAGATA AAAAATGCTC CAGAACTGGA TGAGAATGGA AAAAAATTGA CGATTAAAAA 240  
 TGAAAATATC GCTTTTCAAA ACGTGAACCT TTCATATGAT GATAAACAAG TGATAAAGAA 300  
 TGTGAATTTT GAGATACCTA CACAAACATC AACAGCAATA ATTGGACCTT CAGGAAGTGG 360  
 15 GAAATCTACA TTATGTCACT TACTCTTGCG CTTTTATGAT ATCGATGATG GAAATATTCG 420  
 CATCGATGGT GTTGATATTA AAGATATGAC ATTAAGTACG TTAATGTCGA AAATTAGTGC 480  
 AGTATTTCAA AAGGTGTATT TATTTAATGA TACGATTGAA AATAACATAT TGTTTGGCAA 540  
 20 TCCAGGTGCA ACGAAAGAAG AAATTATTCG TGCCGCGAAG CAAGCATGTT GCCACGACTT 600  
 CATCATGTCA TTACCTGAGG GATATCAAAC AATGCTAAAT GAAAAAGGTA GTAATTTATC 660  
 TGGCGGAGAA AAGCAAAGGA TTTCTATTGC TAGGGCGATA TTAAAAGATG CACCAATAAT 720  
 25 TATTTTAGAT GAAGCAACTG cAAGTATTGA CCCTGAAAT GAACAGCTGA TTCAAACGGC 780  
 AATTAATGAA TTAAGTAAAG GCAAAACAGT AATTACAATT GCACATAAAC TTGAACTAT 840  
 TAAAnATGCA GATCAGATTA TAGTGCTCAA TGnAGGTGAA ATAATTCAAA AAGGTAGTCC 900  
 30 TG 902

## (2) INFORMATION FOR SEQ ID NO: 1094:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 632 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1094:

45 ACGCAAGGGA TATGATTAAA CACCATAATA TACAATCACC TTTTTTATAC ATGAAAGCAC 60  
 TAATAGAATC GATTCATTTA AACATAAAAC ATGATTTTAA CCAGCAAGAT TTGATTGAAA 120  
 TACCAATTGT GTATGGTTCG AAATATGGTC CGGATTTAGA ATCACTTTTA AACATTACA 180  
 50 AAATCAAGCT AGAAACTTTT ATTGAATTAC ATTCTAAGGC GCAATATTTT GTTTCGATGA 240  
 TGGGATATTC ACCTGGGTTt CCTTATTTAA CTGGATTAAA TAAGAAATTG TATATTAATC 300

GCGGTATTGT AACTACGGAT ACAATTAATG ATTGGTTAGT TATTGGTTAT ACACCATTAT 420  
 CACTTTTAA TCCGAAAGAA TCAGATTTTCG CACGCTTAAA GTTAGGCGAT AATATTAAAT 480  
 5 TTAGACCTAT CAATGAAAAT GAATTAGAAG TAGGAGCGTT TAAAGATGTC AATCATAATT 540  
 GAAAAAAGTG GCTTATTTCAG TAGCTTTTCAG aCTTTGGCAG AAGGGGATAT GAACATGATG 600  
 GTGTAATTCC ATGTGGTGCA CTTGATACTT TA 632

(2) INFORMATION FOR SEQ ID NO: 1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1095:

GCAACACGAT TGCTAAAAAA TGATATACTT ATTAATTGTT GCAACACTTG TTTATGTGAT 60  
 ATACTGATCA TGGCATTGTG GCGGATTGAT GACCATACAC ATGACGTGAC AATGATAAAT 120  
 25 CATTGCCACT ACTTGTTAAA ACAGCAATTT CTCAAGTGA AGCTGGTGCh ATATATTnCG 180  
 CCAATAATAT GATGGATGGT TTGTGCTGA AA 212

(2) INFORMATION FOR SEQ ID NO: 1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1096:

AATGAACTGG GTATTnCTTT TGCCATGCTT GCCCACTGCC ATGCATTTGC TGAAGAATGT 60  
 TTTTGTAGAA CCGgCTTAAG AATTGAAGT TTGTAGTAGT ATCTAAAAAG ATTACTTGGT 120  
 GATACTCAGG ATGAATTCCT TGTTcATTAT TTTcAGCTCC TTTGCCCTGA ACCATCTGGA 180  
 45 ACAGAGTTAT TTGTGAGTTT TTACCCAATA CTGTGTAATT ATAAAGGTAA TTAATTCAAA 240  
 ACGCAAGCCC CTATATAATG TTTATTAAAT TATAGGTCGA CCCGTTTTAG TACTTTCTTC 300  
 TGCAGACTTT TGTAGCTGCT TGAAGAAATC TtcATTATTC TTAGACCTTT TAAGTTTGCG 360  
 50 AATAAATCTT TCAGTAAAGT CAGTTGAGTC AGTGAATAGA TTTCTTAATT GCCATAATGT 420  
 GTCTAATTCA GATTTACTTA TCAACAATnC TnCTTTACGC GTTGAA 466

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1097:

TTTTGATTCA ATAGGCGGTT CCGTGTTATC ACTGACAACT TTAGTTGTAG CTTTCATCTTT 60  
 ATGTATTTCT TCGTTAAATC CTTCAAGTTT TTAGTCGTGG GATTTTAACC TCAGGATGTT 120  
 CCATCATGTC TTGACTATCA AGTCCTTnTA CACGTGTCCTT TATGTGATGC TTGATTGCGT 180  
 nCCCTTACTT TTTGAATAGG GGTAGTAA 208

## (2) INFORMATION FOR SEQ ID NO: 1098:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1098:

CCTTCAACGA AAATAGCATA TTGACCATAA ATATTATGAA TTGTTTGTTT AACATCTTCA 60  
 GTTATTGGAT CTTGACTCAA AAATACATTA AATACTTCAA TACCAAATTT ACGTGACATT 120  
 TCTACAGCTT CATACGTATC AATAATACCA TCTTGACTAT AATTAAATGC AGACGGTTCG 180  
 CCGTCTGAAA ATAnGATTAA AAATCGTTGA TGTGTATTTT GACGCATTAA TCGTTCACCTT 240  
 GCAACTCTAA TAGCAACACC ATCAGGATTA TCATCTTGAG GTTCAAGTGC CATAATACGT 300  
 GGGCCATCTT TTTCAAAGGT TGAGTAATCA TAGTTAATAA TTTCATTAAT GATATTTGGT 360  
 TGTGCATGCT CGTCTGAATC AAAGGCATCC TCACTGAATG ATAAAATTTT ATGTTTAATG 420  
 TTCAATGCTT TTAACGTCTC GTGGAATAAC ACTACACCTT TCTTCGTTTC AGCCATTTTA 480  
 TCATGCATAC TTGCTGgACG CATCAATTAA CAATGTAAAT GTnCGCATCA AATGATTnAC 540  
 TTAAATCTTG TTTTTTGTA AACAATTTAT A 571

## (2) INFORMATION FOR SEQ ID NO: 1099:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1099:

TGCAAGTGAA CAAGTCATTA ACTTGTTTAA TACACGTGGG GCACAAGTCG AAGAAGTTTG 60  
 5 GGTGAAGGGC CATGAAATTA CAGAACTGG ATTAACGGCT GGTCAACAAA TACTTGGGAA 120  
 ATAACAGTTC TATTAAGAAG CGGACAGATG GAAAAGATTT TACCTTTCAT CTGCCGCTTT 180  
 10 TTGATTTGAA GGCCGGACCh AATTTACCh GGAA 214

## (2) INFORMATION FOR SEQ ID NO: 1100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1100:

CACCGTATTG TACAAAGAAT TTAAAGTTTT CGATTTCTTn TCTTAATTTA TCATCAGCTA 60  
 TCGGTTTGGT TGGGATAATT TTATTATGTT CCATTTTTTAC TGGATATTCT TTTTCTTTAC 120  
 25 TACGTGAGTA TCCTnTTTTA TCTTCCCAT ATTCCCTCAC AATAAATTCA CCTTTTGTCTG 180  
 TTCTGGTATT GCGGTCTACA TACAGGACCA ATCCTCTGGA TTCCaTATTc TTTCCATTTG 240  
 30 TTTCTATTGT CATTTTAGAG TGAATTATCC aAGTGCCTTT GTCGCCCTTT TCAAACCTCTT 300  
 GATCTCGAAA GCCTTCCTTA TCATAAAAGT CTTCAAGATT TTTAGTTGGA TACAGGCTCA 360  
 ACGTTTTGTT GAAGTTTTCT TTAATTGTGTT TATCTTTACT GCTTTCTTCC TTTTTCATTC 420  
 35 CGCAAGCCCC TATAAAAACA GCTAATAATA CTAAATACAG CCAGAGCCTC AACCTTTTTG 480  
 AGTGAATCAT CATTTACAT CCCCATTTT ATTTTTGATG CAAAGTTAAG TtCAAATTC 540  
 AATATTAATA ATATTAGAGG aAAcTtCAtG ATTAAaTCCT CGTGGATTtT AATTGTTAGT 600  
 40 TGTATTTTTT ACATATCAAC ATCACAAAT ATTTAAAAAG CGCAAATATC TTTATAATTT 660  
 TTATTGGCCT AACCAACTAA TTAATTAAGA TAAATGCGC TTATATTTAA AATAATAACA 720  
 CTGAAACTCA ATGTATTTAC TTATTAAAT TGATGTTTAA ATACAACCTT ACTAACATTC 780  
 45 ATTTTTCGGT TTACATTAAT TkGTTAGATA ACGATATATA TCAtCTCTTA CAGCTTTATC 840  
 CAGTGCTAAA TCCATCGTTA CTACGTTTGA ACCATTGGC ATTTTATCTT GCTTTTCTGA 900  
 ACCTTCTATA TATCCAGCAG TTCCTAAATA ATAAAAATAT ATACCATCAT CATCTTTTTT 960  
 50 CTGTACAAA ATATACATTT TAATTCCTTT TGCTCTATGG GACAAAATTT TCTGAACTTC 1020  
 TTTTGATTCT AGCGTTCTAT TAGATTTAGT AAACCATTTT AATTCATCTT GACTTAAAAA 1080

TGGCATTCTCT TGGCTTTT

1158

## (2) INFORMATION FOR SEQ ID NO: 1101:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 353 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1101:

CCAAATGCTA TAAATGCAAA AATnGCTAAT GCGATATTTT TATAGAAAAT ATCTGGTCCT 60  
AAATTTTGTGTA AATACGTGGT AAACGTTGCG TATGACAATA AGCCAATCAC TACAGCGTAA 120  
ATATGTGAAA TAATTAAACC GAACCGTCTC GCTCTTTCAA AAACAAGTGT TGCTAAAATA 180  
ATAATCAGTA ATCCAAATGA CAAGGGTTGT CGCCAACCTTA ATGGTAAAAA CTGACCTAGA 240  
TAGCATCCTA TGCCAAATAT AATCCAATAA TACATAAAAT AAAGCCACAC TTTACTTAET 300  
GATTGAGCAT GCTGGTTTTG ATGATAATAT GAATGATTG TATTTTGCGA CAA 353

## (2) INFORMATION FOR SEQ ID NO: 1102:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 194 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1102:

CCCACACGTC TTCCACCGGA TAGGTTTCGA GCTCGGGCGA ACCGGGCAGG GCGGTGACCA 60  
CCCCGTGCGG TGTCTTCTTG GCCAGCTTGT TTGCGAGCTT GGCCAGCGTC TTCGTGGGGC 120  
CAATGCCCAC GCAACACGGG ATGCCACCCC ATTGGAGGAT CTGGGCACGG ACCTGGCGGG 180  
CCATCGCTTC GnTG 194

## (2) INFORMATION FOR SEQ ID NO: 1103:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 220 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1103:

TCGCTTTTGC TTTTGCATCA GGTATTGCTG CTATTTTCAGC ATACTTTTTG ACTTTCAAAT 120  
 CTGGTGATCA TGTCATCTTA CCCGATGGAT GTATATGGGC GGTACTTTT CGTCTCACTG 180  
 5 TGGCAAATTT TGGATCGATT TAATATTGAA TTTTACAACC 220

(2) INFORMATION FOR SEQ ID NO: 1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1104:

GGACATTGTA TCGACATTTT AAAGATAAAA GCGATTTATG CTAACGTC ATACAAAGAG 60  
 20 ACCTTGATAT TTTTATCACT CATTTTAAGC AAATTAAAGA TGACTATCAT TCTAATTATG 120  
 AGGTTATGCA AGTGTCGTCA TCGCTTTTAA ATAAGTCATA ATAAAAATCA AATAATTCTT 180  
 GATAAAATGC GCTTTGGTAA AAACGTAATT TATTGTTGCC TGCTTCAATA CATTG 235

(2) INFORMATION FOR SEQ ID NO: 1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1105:

GCGGGGGCAG GTAAATCCAC TTTGACACAT CTTATTGCAG GTGTTTATCA GCCAACAATA 60  
 GGTACTATAA GTACAAACCA GCGTGATTTT AATATTGGGA TACTTAGTCC AATAGCCCTAT 120  
 40 ATTTCAAGCT CTATAAAGA GGATATTACG ATGTTTAAAG ATATAGAAAA TAATACTAAT 180  
 GAAGAAGTGC TAGACGAAGT AGGGTTTATT AGACCAAGTG CCATCCTTC 229

(2) INFORMATION FOR SEQ ID NO: 1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1106:

rAATTAAAAT CAAAATTTGA TGAAGTAAAT GTAATCGCGT CAACAAACGG TAGAAAGTTT 120  
 ATTAATGGTG AAATATTAAA GCAATTTTGC GATAACTATT ATGACGAATT TGaAGACCCT 180  
 5 TTTTAAATC ATGTAGATAT AGCAAATAAA CATGACAAGA TTATTATTTT ACCTGCGACT 240  
 TCTAATACGA TTAATAAAAT TGCmAATGGT ATATGTGaCA ATTTATTATT AACTATTTGT 300  
 CATAACAGCTT TTGrAAAAC TTTCTATATTT CCAATATGA ATTTACGAAT GTGGGAAAAT 360  
 10 CCAGTTACTC AAAATAATAT TCGATTATTA AAAGATTATG GTGTATCAAT ATATCCAGCA 420  
 AATATTTTCAAG AAAGTTATGA ATTAGCGTCA AAAACATTTA AAAAGAATGT TGTCGCACCT 480  
 15 GGAACCATAT AAAGTTCTGG gAATTCATTT GaGATTAGAA TATGGAAAAT CaTAAAGCGC 540  
 GCKATTGATT AGTTTAAATGA ATGATTGGAG TChTTTGAAG ATnCGATTTA CAATGG 596

## (2) INFORMATION FOR SEQ ID NO: 1107:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 673 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1107:

30 ACTAGCTAAA AATAATATTC TATTCTTTTT AACATGGGCA GTTCCAGCGG CAATTAGTGG 60  
 TATTTATATT AAATATATAA ACAAGGCTAC GGTAGAAAGA TTTTAAAT TAGTATTTTT 120  
 CATATTTTCT GTTTCATTTA TTTTGTAAT TTTAATACCA AAACCTACAG GTGAGATACC 180  
 35 TAGCTATATC AATTTTGGAC TTATGAACTA TCAAACGCT TCGTACCTTT CAGCATTTAC 240  
 TGCCGGATTG GGCATTTATT TCATTATGAA AGGTTTCAGTT AAACATAAGT GGATATATGT 300  
 TCTATTTACA ATAATTGATA TCCCTATTGT GTTTATACCA GGAGGGCGTG GAGGTGCTAT 360  
 40 TTTATTAATT CTTTACGGCT TATTTCATT TATACTTATT ACGTTTAAAA GAGGAATACC 420  
 TATCGCAGTA AAAAGCATTG TGTATATTTT TGCATTAAGC ATATCTAGTG TATTGATTGA 480  
 CTTTCTTTTT ACAAAAGGTT CGAATACTAG AACATTTTCA TATCTACAAG GTGGAACACT 540  
 45 TAATTTAGAA GGTACTTCTG GgAAGAGGAC CGATTTATGA AAAAGGTATT TACTTtATTC 600  
 AACAAAGTTC GTTATTAGGC TATGGGCCAT TTAACATtA TAAACTAATC GGAAATATAC 660  
 50 CACATAACAG CAT 673

## (2) INFORMATION FOR SEQ ID NO: 1108:

- 55 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 506 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1108:

TCACAGTGGC GGCACAAAAA GTAAGTGGAG ATTATTTTAA TTTAATTGAC CATAACGATG	60
GCACAATGAG CTTTGCTGTT GCAGATGTCA TTGGAAAAGG TATACCAGCT GCTTTAGCAA	120
TGAGTATGAT AAAGTTTGGC ATGGATTCTT ATGGACACTC ACAATTACCG AGTGATGGTT	180
TAAAACGTTT AAATCGTGTT GTTGAAAAGA ATATTAATCA AAATATGTTC GTCACAATGT	240
TTTATGGTTT ATATGAAGAA ATGAACCATT TATTGTATTG TAGTTCAGCT GGTCATGAGC	300
CTGGATATAT TTATCGCGCT GAAAAAGAAG AATTTGAAGA AATTTAGTT AGAGGTAGAG	360
TGTTAGGAAT CAGTTCACAA ACACGATATC AACAACAAGA AATTCOAATA TACCTTGATG	420
ATTTAATTAT CATTTTAACG GATGGTGTGA CTGAAGCTAG AAAAGTGAAG GTACCTTTAT	480
AGATAAACAA AAACCTTTTAG AATATA	506

(2) INFORMATION FOR SEQ ID NO: 1109:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 552 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1109:

TGATATTGAA AAAGATGTCA TTGTTAAAGC ACAAGAAAGT AAAATTGCTC AAGTTATCAC	60
GAATTTGTTA ACGAATGCAA TTAACATATC TTATGAAGAT GGAGATATTA ACGTTCGTGT	120
GTATCGAGAT GACTTTCGTG TCATTTTCGA AGTACAAGAT TTTGGTATAG GTATTAAATT	180
AGAAGACCAA CAACGTATTT TTGAAAGATT TTATAGAGTA GATAAAGCAC GAAGTAGnAG	240
ATTCTGGTGG GACAGGTCTT GGATTATCAA TTACAAAGCA TATAGTAGAs GCCCACCAAG	300
GCAATATTGA AGTGAATAGT CAAGTTGGCA AAGGCTCAAC GTTCAAAGTT ATTCTAAAAG	360
ATTATAAAGA ATAAnAATTA AAGTGGTAAC AGCGCGTGTA TTTTTCACGA AGTTGTTGCT	420
GCTTTTTTTAT TTCGTTCAAA TCTCTATTGG TATTAAATTA GAGTTAATGA AGTGAATAA	480
ATTCGGTTGT CAATTTTGTC ATTTGTATAT GTCGATTGT AAGTTATAAG TAATAGATTG	540
TTGTGAATCA nG	552

(2) INFORMATION FOR SEQ ID NO: 1110:

(A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1110:

10 AACAGATCAA CAATTGCAGA TCAATTACTC GTCATATTGA TCAATTATCT CTGACAACGA 60  
 GTGATGATTT ATTACGTCAT TGATTGATCA TCACAAGATA AGTCGCTATT GATTTCTCAA 120  
 TTTTACAACG AATTAGGAA AGCTGnAGCA GATAATTGGC TAAGTTGGAC GATAAAGGTT 180  
 15 ATCAATCGCC AATCGTTGCC ATTGAAGAAC TTTTGCTCAC TGGCGCACGC TTCAGATGAT 240  
 ATTT 244

(2) INFORMATION FOR SEQ ID NO: 1111:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 825 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1111:

30 AGTATTGAGT GTTTTGATTT AAGAGACTTG GAAAGTGAGT CAATAATCAA AATCTTACTC 60  
 AATACTTTTA TTTTGGTACT CGCAATTTAG ATTTGTTAAC TAATTTTTTC GCTTATTATA 120  
 AAACGAAACA ATCAAGTAAA CGATAAAGCC TACAAAGATA CCCAATAAAA TAGATAGTAC 180  
 35 TGCCGTCACT ATTAATGGTA ATTTGAAAAA TATTTGTAGG AAAATmCCAA TGATAATTGC 240  
 GATAATTACT GCAAtTaATG TGA CTGTATT TTCATTGAA ATGTTCA TtT ATttTCACTC 300  
 CTtAACAATA ACATTATATC ATGCTATAGC TTTCCAAAAT ATTGAAATAT GTAGATATGG 360  
 40 CTATTGACGA TATTTCTTAA CTTTTATATG ATTAATCGGA ATGAAAAAAG AGAAGTAGGT 420  
 GGCAATATGA AGTCAAATAA ATCGCTTGCT ATGATTGTGG TAGCCATCAT TATTGTAGGT 480  
 GTATTAGCAT TTCAATTTAT GAATCATACG GGTCCTTTCA AAAAGGGGAC GAATCATGAA 540  
 45 ACTGTACAAG ATTTAAATGG TAAAGATAAA GTACATGTTT AAAGAGTTGT GGATGGTGAT 600  
 ACATTTATTG CAAATCAAAA TGTAAAGAA ATTAAAGTTA GGCTTATAGG GGTGATACG 660  
 CCAGAAACGG TGAAACCGAA TACGCCTGTA CAACCATTG GCAAAGAAGC ATCAAATTAT 720  
 50 AGTAAGAAGA CATTAACAAA TCAAGATGTT TATTTAGAAT ATGATAAAGA AAACCAAnTC 780  
 GCTATGGTAG ACCATTGGCG TATGTATGGA TAAGTAAAGA TCGTA 825

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1112:

TCCCTATAAA TCCCCACAAA AAAAGGGTAA ATCCGAACGT CAAATTTTCAT CTCCTTATGC 60  
 CAATCAACGA TCGATTTACC TTTTAAAATT TAAAATGTAT CTGTAATACT CTTAGCAATA 120  
 TTTGTATATG CTGCATCTTC CATAGGTGGA TTGTGTAATC CTGCACGCAT GTCACGATAG 180  
 TAACGTTGTA ATGGTCGATT CATTTCTAAG CTTTTCAGCAC CAACTATTCT CATCGCTAAA 240  
 TCAATCACTT CAAGCCCTTG ATTCATTACC ATCACTTTAC TCGCACTTGT TGGATTTCCT 300  
 ATCTGACTGT CATCTTTATA TTGTTGATAC CCTTTTGCTG TACTCCATAA AAATTGTCTC 360  
 GCACATAACA ATAGCGTTTC CATTTTCCCT AAATTTTGTT GCACAGTTGG CAATGTTGCA 420  
 ATCGTTCCTT CAATACTATT AGGGCTATGT TGGATTGCAA AGTCTACAGC ATAATTTCTA 480  
 GCAGCTTGTT CTATACCTAA ATAACAGCTT GGTATATGCA ATATCCAACC ATTTGGCGCT 540  
 TTACTTTTCT CTGTTTCCAC TAAATGTTTT AATGGTACTT TTACATCATT TAATATTAAA 600  
 TCATGACTTT CTGTCGCTCG C 621

## (2) INFORMATION FOR SEQ ID NO: 1113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1113:

GTACCTTGTT TTTCAGTGT AATTTCCCAA ATATAACCTG GTGTAATACC GTATTGTTTT 60  
 GAGAAGTACT TGAAGGCACC TTCACCTGTa ATCATGGCAC GTTGTTCTTC TGGAAATGTCA 120  
 TTAAATTTGT CTTTACTGTC TTTACTGTCA TTATTTAATT TTTCCAATTG AGCAATGTAT 180  
 TTGTTACCTT GCTTTTCATA ATCTGCTTTA TGTTTTTTGT CGTTATCGAT AAATGTTTGT 240  
 TGAATIGTTT TTACGTATTT AATACCGTTA TCTAAACTTA ACCATGCGTG TGGATCTTGT 300  
 TTATCTTTGT TGCCTTCTTC ACCGTTTAAA TAGATAGGTT TAACATCTTT TGATACTGCG 360  
 ATAACTTTTT TATCTTTTAA TGATTTACCA GCCTGTTCTA AGGCTTTTTTC AAACCAACCG 420

ATATCyTTAG GTTtAACyTC aTAWTCaTGA GGATCTkGAC CAACAGGTAC AATACnATGA 540  
 ATATCGACGT TGTCTCCACC AACATTTTTTA GCCATATCAG ATAGAATTGA ATTCTGTCGnT 600  
 5 ACTACTTTnA ATTTGCCAT 619

(2) INFORMATION FOR SEQ ID NO: 1114:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 549 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1114:

GAAAACCGCA CGACAATGAA AAAAGATATC CGGTTAAAT GGTGATAAT AAAATCATT 60  
 20 CAACAAAAGA AATTAAAGAT GAAAAAATAA AAAAGAAAT CGAAACTTT AAGTTCTTTG 120  
 TTCAATATGG TGACTTTAAA AATTTGAAAA ATTATAAAGA CGGAGATATT TCATATAATC 180  
 CAGAGGTGCC GAGTTATTCG GCTAAATATC AATTAATAA TGATGATTAT AATGTAAAC 240  
 25 AATTACGCAA AAGATATGAT ATACCGACGA GTAAAGCTCC AAAGTTATTG TTAAAAGGTT 300  
 CAGGGAATTT AAAAGGCTCA TCAGTTGGAT ATAAAGATAT TGAATTTACG TTTGTAGAGA 360  
 AAAAAGAgGA AAATATATAC TTTAGTGaTA GCTTAGATTA TAAAAAAGC GGAGATGTAT 420  
 30 AATCATGGCT CAATCAGAAAT ATGAAATCAA TCCCGGAAAA AGAGAGTGAT GAAATGATAA 480  
 AACGTGTAAA TAAATTAGTG CTGTTATTA GTCTTCTGTT TTTAGTCATT AGTATGCACT 540  
 35 GCTGGTTGT 549

(2) INFORMATION FOR SEQ ID NO: 1115:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1115:

TGTTATTGCA ACTATTAAAA ATATnAAAAA CAAAGACTTA ATTGATTATT CTTTATATAT 60  
 TAAAAAGGT TTAGTGGAGC CATTTATTGT ATTCTATAAT CAAGAAAATA TATTCTACAT 120  
 50 TAGCAATGCT GTTATAGATA TCATCAGTGT ATCCAAAGAT ACTCTTGATT ATATAAAGTC 180  
 AGAATTCAAT GATCACTGTG tTCGCCATAC TGATTTTATA GCACAGAGAA AAGCCGTAGT 240



TTATCATCTT CGATGAA

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(2) INFORMATION FOR SEQ ID NO: 1116:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1116:

ACTATGACTG CAATGCCAAC AATGAATGTT ATTGCATAAA GCATATGCAT TTAATCAAGC	60
TTATGTTATT TAGCAAGGGC AAGCCACTTC TCGATTCATG GCTTGCCTTA TTTTATTGTA	120
TATTTTAAAT TATCGTTGCT GGGCCCTTGA TTGACAATCG TATTAAAATG GCCTTATTAA	180
GTCAACTTTG TCTATACGGT TTGGAATCTT CTACCCAATG TCTTATAAAA GACAATCCCG	240
CACCTGAAAC ATAACATCATG AAnATAAGAA nATGGTATAC CATTAATnTG AATCCATTTC	300
CAnTTTATAA CGTTGTAAAT GACACATAAT TAGAATCATA AAGTTTTTCG TGGGATATTG	360
AAACTTTACC CATACGAGAC ATCATGGATA AAAGCGAGGC	400

(2) INFORMATION FOR SEQ ID NO: 1117:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 696 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1117:

TGCATATAAT GTTCAAACGG CAATGATTCC ACTGTATAAA CCTCTTGTCG TGGATGATCT	60
TTAATTTGTT GTTTTAATAA CTGAACTCTT TTTTCATGTT CATAATGAAC ATAAATAAAT	120
GCACTAAGAT ATATCACAGC TAAAACTAGT GATGCACCTT TAATAAAATT AACATTGATT	180
GACTTATATT TCCGAAATTC TTTTAATAAAA ATAATTAAAA TGATTACATG TATCGTATAA	240
ACAATCAAAA AATTACCTGG TTCTATTGGA GTAACAATGA CTAGTGTCGA CGCCGAAACA	300
CATATTGCAA TAAGTAAGGA ATATAAAGTG ATTTGTGTTT TACGATCATT AATAGACAAA	360
TAAATACCTA CAAATATCGA AAACGCAAAG TAACCACATA CAATTACGTT CACAAAACCA	420
ACCAATCCAA TATCTGTATT TTTATTAAAT AAAAAGTGAT TGTAATAATAG TAAATAATAA	480
AGCGGTAAAG TGATAAATCC TATCATAATG ATACGACGCT TTAATATTGT TAAATGTACA	540

ATCTGACTGA AAATGACACC ATATGGAAGT GACGTTGATA TCATTTCTGC AAATTTTGAA 660

AAGATACCTT GATTATTTGA AACTTGTTGA TATTCT 696

(2) INFORMATION FOR SEQ ID NO: 1118:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 223 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1118:

GCAGTGACAA TCAATAATTT GTAAC TAGAA GATAATAAAG AGAACGCTCT ATAGAGACGA 60

ATTGAAGGTT TGATTTTAAT GTCTGTTAGT AAGAATCATA TCAATGAGAT GCCTATAGTA 120

CTCAGANTAT ATTAAATTAA AACCGTCATT AATTGTTTTT CCGAAAACCA TTTGTAACCA 180

TTTnAATGTA GTTGGACCTA CCTACGTTCT CCAATAATCC ATT 223

(2) INFORMATION FOR SEQ ID NO: 1119:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 265 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1119:

CTGCTTTACC TTTTCCAAC TTAGAAATTG CTACATAGGG GCCTTCTGCT TTACCGCCCC 60

AATTCCAATT CCACATTTTC AAGAAATAAG GAGGCAAAAA TGTTTCATATA TGAATTGGAA 120

TTATTTGTTT TCTTATTAGG CCGAGATGCG CCGCGTGCGG CTGCTGGAGA TGGCGGACGC 180

GATGGATATG TTCTGCCAAG GGTTGGTTTG CGCATTACACA GTTCTCCGCA AGAATTGATT 240

GGCTCCAATT CTTGGAGTGG TGAAT 265

(2) INFORMATION FOR SEQ ID NO: 1120:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 329 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1120:

CATGACATTA CATGCTTATT TAGGTAGAGC GGGAAACAGGT AAGTCTACGA AAATGTTGAC 120  
 CGAAATAAAA CAAAAaATGa AAGCAGATCC GCTTGGAGAT CCAATCATT TAATTGCGCa 180  
 5 ACTCAAAGTA CATTTCAATT AGAAcAAGCC TTTGTCaATG ATCCGGAATT AAATGGTAGT 240  
 TTAAGAACAG AAGTGTTGCA TTTTGAACGA TTAAGTCATC GTATTTTcCA AGAAGTTGGT 300  
 AGTTATAGCG AACAAAAGTn ATCTAAAGC 329

10 (2) INFORMATION FOR SEQ ID NO: 1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1121:

ACACCTCTTT TTTAATATAT GTGAACTATA TATAGTGTAT AGAGAGGTTA CTTGTTACTC 60  
 AATATAAACA AAAATCAACT TTGTCAAAAT AAATGTGACA AAATTAAATA AAGTGTCATC 120  
 25 AATGTGACAG TATAGATCAT TTGCAAAAA GTCAAAACAA AAAAATTGTT TTAGGGATTT 180  
 TTCAAAATTT TCATTGTGGA AAATGATTG nCAAAACAAA ACAACACnTT GTGAGCAATG 240  
 AAGCTTCAAT GG 252

30 (2) INFORMATION FOR SEQ ID NO: 1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1122:

nAATAATAGG CGCCACCTAA TAAACCAGCT GGAATGCCTA TCATTGGTGT TGTGAATGAG 60  
 CTTAATACAA TAACAAGTAT TGTTAAAGCA ATGACGTTAT ACCAAGTTAC AGTCAAATTT 120  
 45 TTCAAATCCT CATATGATTG TTTTACTAAT TCTCTAAATT TCATGATTCA ATCTCTCCTT 180  
 TTCTTAAATC AATTAATAGT TATACTGCAT TGCTTAAAAT CAAnATATCT AATGAAGCAT 240  
 CTTTTAATCG TAAGTGTTAA ATGGTTTCT TAATCAATTT GTTTGAATGT ATAAAnAGCAA 300  
 50 TTAAAGCAAA AGTAATGTAA ATGAGGGTGT ATACAACAAT TACTACAATA ACCGGCATGA 360  
 AGGAAATATT ACCCATCAAT TTCATAAATG CGATTGCGGC 400

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1123:

AATACAACCT TTTATCATAG TGTAATGTA TTCTACCACT ATTGAGAAGT TTTCATATTA 60  
 TTCAATACCT GAAATCGCCA TAGTAATATT ACTAAATGCA CACTGCATAT GTTGTTTAAC 120  
 AACACAACCT TAAAAATATA TTCTAACTCT ATCTACGAAT GTACTTAAAT ATCATAACAA 180  
 TCTATTCCAA ATCAATTAC ATTATTAGCT ACCTTAAAAA CCAAACCGAG GCCTTAGGCC 240  
 TCGGTTTAAA TATATATAAC GCGGACATG 270

## (2) INFORMATION FOR SEQ ID NO: 1124:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1124:

GGTCTTCTGT ATCAAATTAT ATTATGAGAG TTAGACTCAG TATTAATGAA ATCGTTGATA 60  
 AAGATCAAGT GCTTGCATCA CAAATAGGTG GATTACTATG ATGTTTAATC AAATTAATAA 120  
 TAAAAATGAA TTAGAAGAAT CATATGAATC TGAGAAAAAA CGTATAGAGA ATGAACTGCA 180  
 AAATTTAAAT GAACTTAGGC ATAGAAGTCG AAAAGAAAAT GAACGTAGTT ATGATGTTTT 240  
 TCAATATTTG AAGCACGAAA TGAATTATAG TGAAGATGCC CAAAGGAAAA TGACGAGAAA 300  
 TATAGAAGCG TATGAGCAAG AAATCAATGA GATAATTAGA AAGCAAGAAT GGAAATTAGG 360  
 AAGAATATAA AGAAGACTTA AAAAAGTCTT ATGAAAAGCA 400

## (2) INFORMATION FOR SEQ ID NO: 1125:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1125:

AAATATAyTC GATCATTGAT AATATGTGCT TTACTATTCC AAATAACTTT CAAATTTTGA 120  
 TAATATTCAT CAATACTCTC AATATAACTA ACCAGTTTAT ACAACCATTG GCCATCGACT 180  
 5 TTCACATATT TTTGAATACT ATTTCCAAyT TtAAGACGTG TTGGTTCATT TACAAAATGC 240  
 CCCAAATTAA TACCACTTAA TAATCCAAAT GGAGTTGGAC GTGTTGACAT TCTAATTAAA 300  
 TATTTTAATA AACTTTCTTT AGCATCTCTA ACCTTCTTGT TATCGCCATC AAAATTTATT 360  
 10 nCnTGTAAG TACAATA 377

## (2) INFORMATION FOR SEQ ID NO: 1126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1126:

GTTACATTAC TGTTTCATGTC CACAACGTTT GTCAGCGATT ATCATCATTG TGTTATATCT 60  
 25 TATTTATAGC AAGTGCATGG TCTGGATAAG TAAAGGTATT CATACTTAAG TAACTTGAAC 120  
 ATTGGTTTAG GACTATTTTA ATGGTnCTGC TtnAATTGTT GGCCAACTGG TTCTTATTTT 180  
 30 AAATATGTAA CTAGCTCTAC GGGTAGTTAC TAAACACATC CTGGTTT 227

## (2) INFORMATION FOR SEQ ID NO: 1127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 717 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1127:

CCAATGATAC CGTTATAGCA TGTTAATGTT TTTGTACGAA TATAATCTAA AACTTCGAGT 60  
 45 TCATCACTTA ATTTCCACGT TTCTGCTTTG TTAAACCACA TTAAAGGAGT ATGAATGnCA 120  
 AAATCTTTGT CCATAGCTAG GCTTAATGTT ACGTTCATTG ATTTTATAAA ACTATCGCGA 180  
 CAGTCTGGGT AGCCTGAAAA GTCTGTtTCA CATACGCCTG TAATAATATG CTTAGCCCCA 240  
 50 ATTTGATAAG CTAGAGCGCC TGCAAACGAC AAGAAAAGTA AATTTCTAGC TGGAAACAAT 300  
 GTATTAGGTA TACCATCTTC ATTATTAGTA ATTTCCATAT CATGTGTGTGTAATGCGTTT 360  
 GGAGTAAGTT GTGATAATAA TGACATATCT AAAACGTGAT GTTTCATTCC TTGATCTTGT 420

AGTTCAACTT CTTTGAAATG TTTTMTTGCA TAAAAGAGAC ATGTTGTACT GTCTTGACCA 540  
 CCACTAAAGA CAACGATGGC TTTTTCATTA TTAAATACAC TTTCCATTTT GTAATTGCTC 600  
 5 CTATCATTAA TAATATTAAT AAAGAGGTTA ATGGCATTGA TAAGCCCGTT TTTAATTTAT 660  
 AAAATAAAAA AAGCCnATCT CCATAAAAGA TAGACGAnAG AAATGGGTTG CTCCTAT 717

(2) INFORMATION FOR SEQ ID NO: 1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1128:

GATTATTGCA TTGACAACTT ATATCTATCT AACGTTAGTA GCATTTAATT TCATTTCCGG 60  
 GGTTCCTAACT TTACCAGGAT TAGCGGCGTT GGTATTAGGT GTAGGTATGG CTGTAGATGC 120  
 CAATATTATC ATGTATGAGC GTATTAAGGA TGAACCTCGA ATAGGTAGAA CGATAAAGCA 180  
 25 AGCCTTTTCT AAAGCAAACA AAAGTTCATT CCTAACAATT TTTGATTCTA ACTTAACAAC 240  
 AGTTATCGCC GCAGCAGTAT TATTCTTCTT CGGTGAAAGT TCAGTTAAAG GTTTCGCGAC 300  
 AATGTTATTA TTAGGTATTC TAATGATCTT TGTTACAGCC GTGTTCTTAT CAAGATTCTT 360  
 30 ATTATCATT CTTGTTTCAT CAAATATATT CAAAAATCAA TTTTGGTTAT nTGGTGTTAA 420  
 AAAGAATAAA CGACATGATA TTAATGAAGG TGTAGATGTT CATGACCTTA AAAC TTCATT 480  
 35 CGAGAAATGG AATTTTGTTA AATTAGCTAA GCCATTAATT GGAGTAAGTA TTTTAATTGT 540  
 AGTGTCGGTT AGTTATTCTnT TATATCTCAA GTAAACTTAG GAnTGAnTCT CAAGT 595

(2) INFORMATION FOR SEQ ID NO: 1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1129:

ATTTTAACTT TCTAAGAACA AGTTGTCAAG ATTTTTTCTT AACATATCAT GTTCTGTTAC 60  
 AATATTAATA ATGAATACCG AAAGGACGAA TTGCAAATGA AAAGCGTTGG CTTAATCACA 120  
 GAATATAATC CCTTTCATAA TGGGCATCAA TATCATATTA ATCAATCTAA AAAACTTACA 180

ATCTATAATA AGTTACTCGT GCAAAATGGC TTTCCACCGC TGTTTAGTTT CGGACTACCA 300  
 GCAACTGCAG TTATCACTGG CGnCATTTGC GACTGCCGTT AAGCGCGGTT TTGGTGCCTA 360  
 5 CATGCnTGGn G 371

## (2) INFORMATION FOR SEQ ID NO: 1130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1130:

ATGATGATGA GATTATGACT TTGCGAAAGA TATCGGTGCG CCTTATGAAT TTAAACAnA 60  
 nTAAAGACCA TGGTCGTTAC CGGTAGTTAA CTTTGCAGCT GGTGGCGTTG CGACTCCTCC 120  
 AAGATGCTGC TTTAATGATG GAATTAGGTG CTGACGGTGT ATCCGTTGGA TCCGGAATT 180  
 TTAAAACCAG AAGATCCCGG 200

## (2) INFORMATION FOR SEQ ID NO: 1131:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1131:

ATGAGCTAGT CGATTAAAGT TAATATTTGA AAATGAAGCA GGCATTAAA TGCAATAAAT 60  
 TAAATAAGTT GTCATTAAAG CATTAATAAT AGAAATGATT TTAACAGGAA AAAAGTGATG 120  
 AATATTTGGA AAAGATATAT ATCGTGCACT GTCCTGAGAG ATTAGATTG GGAACCAAT 180  
 TTATCCnTGA ATCGAGATGT nGC 203

## (2) INFORMATION FOR SEQ ID NO: 1132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1132:

ATCTAACAGT ATTGAAATCT TTGTTAGCGT CAATCGACCA TGTATTTTTA AGTATTGTCT 120  
 CTAACAACCTT AGCACGACGT CTTAACCCTT TAGTAAACAA TCCTTCTTTA GnTTTAGTAC 180  
 5 GT 182

(2) INFORMATION FOR SEQ ID NO: 1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1133:

CAAATTTAGC CAGGnATACA AATACATATA ATAAAACTGT TTGTAAGCTT ACGTTGACAA 60  
 TCTGGCGTAA TTGGAAAACCT AATGAATTTT CTCCAAGTAG GTTTTACCCT GTAAACmAAA 120  
 TAACAATTcm AATAATATGr AATCACAAAg CGACTAGAAA TCCGGTAATA TGAATAATCA 180  
 TATATTCAAT GTGTAAaTAAT TTTAACAGCA ATAAATAGAC AACATAATAA TTTAACGTAT 240  
 TAATGCCGCC AACAAATGATA AATTTTAAAA TTTCAGCATG CGTTTGTGTT AGTTTCATAT 300  
 GTGTACTCCT CAACATCana ATATATGCAT AACTACGTTC TCGAACATAC TCGAATATGC 360  
 GAGCCAATCC GCTTCACTTC AAATATGCTT ATTTCAATCT TTATACCCTT TCACAGCAAT 420  
 TTAGTCTCTT TnCCCTCATC CTTATAGGCC nTATATGTAA CCGATTATCG GGTGGACTCA 480  
 TTGGC 485

(2) INFORMATION FOR SEQ ID NO: 1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1134:

CTTGTTTTAT CGACAGATGC TGAACACGCA GTCaAAATAA ATAAATTACA TAATAAAATT 60  
 CCAATTAATC TTTTCATAAT ATCATCCTTT TGTTTTTCAA TTGATATTCA TTTTCAATTA 120  
 TAAAATATTA rAAGAATTAG TCAACGCCTG TGAGTAATAC ACATCAGTAA CATTICTATT 180  
 TTCATTTATG ATATTATCTA ATTATTAATT TAT 213

(2) INFORMATION FOR SEQ ID NO: 1135:



(A) LENGTH: 526 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1135:

TGTGACTCCA TGTATTCATG TATCATTGTA CATTGTGAA TTGGTTGAAA ACTGATAGTG 60  
 CCCGTTTAAT TACAGGTACT GAGGATGCTT TCAGGACATG GATTTGTTCG AAAATATGAC 120  
 AATATTTTAC TATGGCTCTT CACTTCTCTA GGGAAATTGC TATCTTGATT AATCCAATCA 180  
 ACCAATTCAC CTAATGGTGT GTCATCACCA AGAAAACTTT GCATAAATTC GTAAAAGCTC 240  
 AATACCTCAC CTCGATTaAT ATACTTGAGC CATTaATATA ATACCATAAA AGAATGTGTA 300  
 TTTTaCATAA AACTTTTTTaT AAAGCAATTT TATAAATCTA AATTTATTGA ATGTTTAAGA 360  
 AGTTGTGTAT AATGAAATAA ACGTGTTGAA ATAGTTAGGA TGATGTTAGT GGATATCAAA 420  
 CATATGAAAT ATTnTATTGA AGTCGTTAAG CAnGGAGGCA TGAATAATGC TTCCAAATCA 480  
 TTATATATTG CACAACCTAC AATTAGGAAA GCnATTAAAG ATATTG 526

## (2) INFORMATION FOR SEQ ID NO: 1136:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1136:

AGCAAAAGCA ATGATGACAA AAGAACAAGC TATGTTAGCA GATGGAAGTA TTAAACAAGA 60  
 TCAATATGAT AAACAACTGT TATCGAnAAT CGGAAAATCA CAATTAGATG AATTGTCTTC 120  
 TAAAGATTTA CAAGTTTTAG CTATTTTTTCC GAGAGATGAA TGCAGGAACA GTTTTAGATC 180  
 CACAAATGAT AAAAnATGGA AGATGTTTCAG TGCAAAAAGA GTATGGCAGC AGTTTTCTCC 240  
 AGCAACTTTT CCAnATTTAC CCAGGTGTTT AACACGTCCT ATTGGATTTG GGCTTAGGAC 300  
 AATTATTCCA TATGGGCGGA T 321

## (2) INFORMATION FOR SEQ ID NO: 1137:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1137:

ATAAATCCTT ATAAATCAT GAGTTGGACG ACTTATCCAC ACAATTATAC TTTTTCAGTT 60  
 5 CTCTATATGT CAAATACCTG TGAATATGTT GCTAAAAATA GTATAACTTT GTGTGTAATT 120  
 TCTAATTATC CACAATTCTG AAAACTATAA ATGTGCATAA GTGGATAmCT TTcCTTCTAT 180  
 AGAGTATCTG TTAGTGAGTG TATCAAAaCA GTTTGGGAaA TAATTTtATAA AGThTGTATA 240  
 10 AGAnCTGTAT AAGGTGTTcG AACATTGTAA AACTCATGC TTCGGACCAa ACTCATGGTG 300  
 ATGTTATGAA ATTTGATTGC TCGCATCGnG 330

## (2) INFORMATION FOR SEQ ID NO: 1138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1138:

CTTGATAAGG GAAGATTTCG CAGCACCATT CGGGCCCATG ATACCAATTA TTTCGCCGCG 60  
 25 TACTGGTATC GATAAGGAAA TGTTTTTAAG TACATGCTTA TTACCTAAAA ACAGATTTAA 120  
 ATCTTTTGTT TCTAACAAAC GTTTATACCT CCTAATTAAA AGTTTAGGCT AACCTAATTA 180  
 30 ATTGTATAAT AACTGAGAA TATTTATCAT GTCAAGTAAA TTCGTGATAT AATATAGACA 240  
 ATGTATGTGA GGTGAAAGTA TGTTAACTGA AGAAAAAGAG GACTATTTAA AGGCAATCCT 300  
 TACGAATAAT GCGGATAAAA ACTTTGTGAC AAATAAAATC TTATCTCAAT TTTTAAATAT 360  
 35 TAAGCCTCCA TCTGTAAGTG AAATGGTAGG ACGTCTTGAA AAAGCAGGCT aTGTGAAAC 420  
 AAAACCATAC AAAGGTGTTA GATTAACAGA GGATGGTTT 459

## (2) INFORMATION FOR SEQ ID NO: 1139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1139:

TAAATACTCT CGCCGGTTAT TTCGCTTCCT CTATACGGAT TGGCGAAAGA TACGGTGCAT 60  
 CGGTTTCAAC TAGCAAACGC TCCATTGACA CATGCTTAGC AACTTCTTTA GGCTGTTTAG 120

## (2) INFORMATION FOR SEQ ID NO: 1140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1140:

ACCTGAATGC CCATCAATGA CAGACTGGAT AAAGAAAATA TGGTACATAT aCACTATGGA 60  
 ATACTATGCA GCCAGAAAAA AATGAGGTCA TATCTTTTGT GGGACATAGA TGCAGCTGGA 120  
 GGCCATTATA TTTAGTAAAC TAATGCAGGA ACAGAAAAAC AAATACTGCA TGTTCTCACA 180  
 GCAGGAGCTG AATGATGACA ATTCATGAAC ATAA 214

## (2) INFORMATION FOR SEQ ID NO: 1141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1141:

GTTTCTAGTT GTTTATAGTT ATCGCATCTC TTGATGTAAA ATCTAAGATG TTTATGCATT 60  
 TCTAGATGTT AATTCTTCGC TGCTTAAGAA TTATCTTGAT GGTAATCTA GTTGTGCCAT 120  
 GCATTTTCTC ATGATGAATC TAAGGTGTTA ATTCATTGAT GTGTGCTGTT TCTTGnnGCT 180  
 TCATTATCTT GATGGTGAAT TTCGTTGTCT AATGCACTTT TTCAAATGA 229

## (2) INFORMATION FOR SEQ ID NO: 1142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1142:

TTATGAATCG TAAACACTAT TATGAAATTG CGAGAGTAGT ATGGACAATT AGAATGATGG 60  
 TTTGAGATna ATGAGTGTTA TTAACCAAGTG CGTCATTTTC AAAATTAGAT GCCATTTGCT 120  
 GTTTATAATA AGAAGATTTG ATAATTAACAT ATGATAAGAA AAAATAATAA TCCCCTAAAT 180

GGTAAATGTG TGAATAGGAA TATCGTTaAA CTAGTTGTGT TCATGCTAAT TTTAGTTGTA 300  
GCAGTAGCGG G 311

(2) INFORMATION FOR SEQ ID NO: 1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1143:

GATCATGCTG CTTATGAATT ATTAAAAGAG CAATTAGAAG ATGTGCTTGA TACATTAACT 60  
GATAGAGrAG AAAATGTATT ACGATTAAGA TTTGGTCTTG ATGACGGCAG AACAGAACA 120  
CTTGAAGAAG TTGGTAAAGT TTTCCGTGTT ACACGTGAAC GTATTGACA AATTGAAGCA 180  
AAAGCACTTA GAAAATTAAG ACATCCAAGT CGTAGTAAAC GTTTGAAAGA CTTTATGGAT 240  
TAATTTATAT CAATTTTAAT GATTGATACC AAGACATGAA TAAGCGCTTA TTTATTTTAT 300  
GATTAAGATT TAACCTGAGT GAGGTTGGTA CATTGAATAA TGTTCAACCT CTTTTTTCAT 360  
AAAGGAGAAT AAAATGATTT CGTTAAATAA CCGATTAACG ACn 403

(2) INFORMATION FOR SEQ ID NO: 1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1144:

nTTTTTATTG ACGAATnGAT TTGGATGCCA GTGGTTTGGT CCTAAATCTT GAATGGTAAT 60  
CGGTATTTG AAGTTGTCAT GTGCTACAG GTAACCGATA CnATAAGTA CGAGTGCGAT 120  
GACAATGGTT GTTACGAGCA AGATGTATTG TAACCATTGC TTGAACACAA CAAGTTGTAT 180  
ATAAGGCTTC ATTGACGATA CCTCCAAACC AATACAGCTA AATTAATTAT CAAAAGTGCG 240  
ATGAAsCTAA GATAGAACT AGGGTGCAGT TCTAAAATGT AGTTGTTTAA AATAATTTCT 300  
AACAAATTGAT TTGTTACAAC TGCGAACGGT TGAATATTGA AAACACCATT TGCTATATGT 360  
TGTAACAAAAA TCGTAGGTAT TGTTAAACCA GATAACACCA GGATGACAAT AGCTAATATG 420  
ACTTTACTAA TACTATTCAA CAAGCCTGTT GTTAAAAGTT CGATGAGTAA TAACCACAGT 480

AAGATATTCG GAATACTGAA CACAATCCAA ACTACACCAA CGATACTCCA TAACATAGTA 600  
TAAAACCATG Tn 612

(2) INFORMATION FOR SEQ ID NO: 1145:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 223 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1145:

GAATTAATTA CGCAATATCC GCATCTTAAA TCAGTAATCG AAAAATATGC TTTAAAATAA 60  
AAGTGATCAA TGAAGTGGTT TGAAGGTTGT nAATAAACCT TTGAGTCACT TCCATTTTTA 120  
AAAGTATCCT GGATGGAACC AGAATAGATT TGAAGCTTCA GCGGTTTTTA ATGAAAATAG 180  
CCATTAAATG ATTTGGAAAC GGTAAGAGGG GGTATTTAAA ATG 223

(2) INFORMATION FOR SEQ ID NO: 1146:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 598 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1146:

CGCTACGGTT GTCACGTAGA GATTAAAGAC ATTCGTTTTA GCAGTCTTTT TTATTGAAGT 60  
AGACAATGCA AGATTAAATG GTAGTGTCAAT TTCATTTTAT TCAACTGCTA GTAATACAAT 120  
ACTCAGTGTT ATTTCTGAAG ACTGGTTGAT AATGAGACAT GCATATTTAC AAAACTGTGT 180  
ATATTGTGTA TATTGTATAT ATACAGAAGT TGATAGGGGG ACGTTGATGA AAATAATTTT 240  
AAAAACAAT AGTGATTTTC CGATTTATGA ACAGATTAAG CAACAAGTAA AACAAAATAT 300  
TTTAAAGGGA CATGTTGCTC CTGGAGAGCA TTTGCCGTCA ATGAGAGAAC TTGCCAAAGA 360  
TCTTCAAGTA AGTTTGATTA CTACCAAACG TGCTTATGAA GATTTAGAGA AAGACGGTTT 420  
TGTTACAACA ATTAGAGGAA AAGGGACCTT TGTTAAGGAG CAAGATAGTT CTATTTTAAA 480  
AGAGAAACAA TTTTTIACCA TGAAAAATTG GGTAAAGGA ATTGGGTTAA TTAAGCnCAA 540  
GCCCATCCGA ATTGCCACTT GAGGGAnTTC CAGGATATTT nACCGTCATT TATTGAGG 598

(2) INFORMATION FOR SEQ ID NO: 1147:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1147:

10 CAAATCCAAG TGCAACAGCT TTATCAACCG CTAAAGCTAA ATCCGTATCA GCTTTTTCAG 60  
 CTTGAACTGG TTTGATTTGT AACTGTTCTG TTAGAAGTTG GCGTTCTTCT TTACTGACTG 120  
 AATCAAAGTC TCCCCTGAG AAAAAAGGGA TAATTTGATG CTTCAATAAA ATCAAAGCAC 180  
 15 CTCTATCAAC GCCGCCCAT TTACCTTCAT TACTTTTGGC CCAAATATCT TCGGCAAGT 240  
 GTCGATCAGA ACATAATAAA TTTATATGCA TATACACTCA ACCTTTCAAT GCTTGTGTGA 300  
 CTTTTTAAAA TCCCCTGGTT AAAGGAAAAT GAACnGGTTA CCAGCATTGT AGGCACCATT 360  
 20 TCAACACCAA CTTCGGCGGA TCnGGATTAC GCCTCCATCC 400

## (2) INFORMATION FOR SEQ ID NO: 1148:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 352 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1148:

TTTTATGGGT CGTATTTTTT AAAGAACAGT CATCTCAATC AAAAGAATAG AATTATGATT 60  
 35 AAAATTGATG TrGTGTAATT AAAGTAAGAA ATrrkAAATT TCCTAGATAC TAGATAAATC 120  
 GTTCAATATT TTATTAATAA GGAGGCCAAT GAyTGTGAAT TATCTTAAAC ATAAGTTTTA 180  
 TAACTTGTTA ACTACAATGA TTGTCTCTT TATTTTTGTA CTTTCTGGTG CGATTTTTTT 240  
 40 AACATTTCTA GGGTTTGGTT TATATGGATT AAGTAGAATA CTTATTTATT TTAGGTTGGG 300  
 TGACTTTACA TATAATAGAA GTATGTACGA TAACCTATna TATTATGGCA GT 352

## (2) INFORMATION FOR SEQ ID NO: 1149:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 916 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1149:

55

5 GGCAAGTGTC GATCAGAACA TAATAAATTT ATATGCATAT ACACTCAACC TTTCAATGCT 120  
 TGTGTGACTT TTTTATAATC CTCTTGTTTA AAGAAAAATG AACCTGTTAC TAGCATTGTA 180  
 GCACCATTTT CAACACAAAC TTTGCTGTGA TCGGTATTTA CGCCTCCATC AACTTCAATA 240  
 TCAAAGTTTA ATTGACGTTT CATTTTAATA GCATTAAGAC CCGCTATTTT TTCTACGCAT 300  
 TGATCAATAA ATGATTGACC ACCAAACCCT GGGkTAACTG TCATCACTAG TACATAATCA 360  
 10 ACAATGTCTA AAATAGGkTC AATTTGTGAT ATkGGkGTAC CAGGATTAAT TACTACACCA 420  
 GCTTTTTTAT CTAAATGTTT AATCATTTGA ATAGCACGAT GAATATGAGG CGTTGATTCTG 480  
 ACATGAATTG AAATCATATC GGCACCATGT TCTGCAAATG ATGCAATATA CTTTTCTGGA 540  
 TTTTCAATCA TCAAATGTAC GTCTATAGGT AATGTTGTGC CTTTTCTTAC TGCATCTAAT 600  
 ATTGGTAAAC CAATAGATAT ATTAGGCACA AATTGACCAT CCATAACATC AAAATGAACT 660  
 20 CCGTCGACGC CTGCTTCTTC AAGTCGTTTT AATTCATGTT GTAAATCCAA AAAATCAACA 720  
 GATAATAATG ATGGATATAG TTTTGTCAAT TAATATCTAA CCTTTCTATT TGAAATTTCA 780  
 TTAAATAGTT GTAAATAATG GTCGTATCTA AATTGCGCAA TATTCCTAT CTCTAATTGA 840  
 25 TGCnTAACCA TTACCATTAG GGTCTTGn AAGGnTACCA ATCCCAAACC TTACCATGGT 900  
 TCCCCATAA CGGTTT 916

## (2) INFORMATION FOR SEQ ID NO: 1150:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1150:

40 AATTGGTTGT GGCTTCATAA TGTGCAGTTG CTAGACTGAC AACAAATCG TTTTCTAAGC 60  
 CTACGATAAA GACATAATCG TTTTCGGTTT TGTTGTTTTT TAATGAGCGT TTGATGATAC 120  
 GTTTATCTTC AGTTAAAGAT AAATTTAACT TAGTATCGTA AAGTTTAAGT GCTTCGTTGT 180  
 45 AATGTGGATC TTTGACAGAT TGAATGGTTT TAAATTCCAT AAGAACACCT CCCCATTTTA 240  
 AATAATATTA TAGCATAATC GCCTGCTGTA AAAGACTGTT CATAAACTTT TAAATGGTAT 300  
 AAAAaACTGT ACTATCTTAA ATTAGACAGT ACAGTAATCT CATTTTGAAT TCAGTGTGAT 360  
 50 AACTAAGCtT TGGGACCTTT AGATGCnTTC ACAAATGTG 400

## (2) INFORMATION FOR SEQ ID NO: 1151:

(A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1151:

10 CACCGTAGTT GCTACCGAAT ACCACCATGT CGCCAGGTTG TGCTAAGAAG TCCGGTGTAT 60  
 TTTGGTATAC AGTTAGCTAA TCCGTCGAAG TTGTTAGCGA CGGnATATCT TTTGACCTAA 120  
 ACCTTTTAGA GTAATCCAAA CAAAACTTTC CAACCA 156

15 (2) INFORMATION FOR SEQ ID NO: 1152:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1152:

25 TCAATATATT TATTTTCTAA TGTTAGCATT AGACTGTCAA TTAAGTTGCT AAGTTGTTCT 60  
 TTTTtagTAA TTAAATAACG CATATAATCA TCTAAATTTT TCATTTTTC ATCTAGCATT 120  
 30 AAAAGGtagT GCTTGATATT ATTTCTACTG TTGCTCCAAA AACTGnTCAA ATATACGTCA 180  
 CATAGTCATA CTACACCTTT ATATAGTTTA AATACCAATn GCATGACCTC GTG 233

(2) INFORMATION FOR SEQ ID NO: 1153:

35 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 339 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1153:

45 TATATTAnCT ATCGTTTtagT GAATCGTTTT TTTAAAGTAA AGAGAATTTT ATATATTACT 60  
 GGTACAACtA CAAGTGTTAA TAAAGTTGAT GAAATTmAAC CACCAATAAC TGtagCAGCT 120  
 AATCCTTTTCG AAATAAGAAT CnGCTATCT TGACCAAATA ACAnAGGAAC TAATGCACCA 180  
 50 ATTGTTGCAA TCGCCGTCAT TAATATCGGT CTAATTCTAG TACCGCCTGC TTCGATTAA 240  
 GCTTCTTTCA TCTCCATGCC CTGTTGCTCA TTATTAATAA CACGGTCTAT TAACACAATG 300  
 GCATTTGTtA CTACGATnCC AATTCAACAT TAGCATACC 339

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1154:

10 GTCACCCGAG GAGATATnCA ACTATTACCA TCAAGATGnG AAAAATGGTg CCTTGGGCAA 60  
 TTGGTTTTTTT CATTTTAATC TTAATTATTA TATTGTTCTT TTTACTAAGA AACTTCAATT 120  
 15 CACCTGAAGC GCAAACATAA ATATTAGTGA ATGCGATTGA GAATAATGAT AAACAAAAAG 180  
 TAGCAACATT ATTAAGTACT AAAGATAATA AAGTAGATTC TGAAGAAGCA AAAGTATACA 240  
 TTAACTATAT CAAAGATGAA GTTGGGCTTA AGCAATTTGT CAGCGACCTT AAAAATACGG 300  
 20 TACATAAATT GAATAAGAGT AAGACCAGCG TAGCTTCTTA TATTCAAACC AGATCTGGTC 360  
 AAAATATATT ACGTGTAAGT AAAAATGGCA CACGTTATAT CTTTTTCGAT AATATGAGCT 420  
 TTACTGCACC TACCAAGCAA CCAATTGTTA AACCGAAAGA AAAAACAAAA TATGAGTTTA 480  
 25 AATCTGGTGG TAAGAAAAAG ATGGTTATAG CTGAAGCAAA TAAAGTGACG CCAATAGGTA 540  
 ATTTTATACC GGGGACATAT AGAATTCCAG CTATGAAATC AACTGAGAAC GGTGATTTTG 600  
 CAGGCCATTT AAAATTTGAT TTTAGACAAA GTAATTCTGA AACGGTAGAT GTTACTGAAG 660  
 30 ATTTTGAAGA aGCAAATATA TCTGTAACCT TAAAAGGCGA TACAAAATTA AATGaTAGTT 720  
 CTAAAAAGT AACTATAAAT GaCCATGAAA TGGCATT TTC AAGTTCCAAA ACGTATGGTC 780  
 35 CATATCCACA AAATAAAGAT ATTACCATTT CCAGCTT 817

## (2) INFORMATION FOR SEQ ID NO: 1155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1155:

40 AnAGAAAATC TACTCTTTTA TTTCACCGGT CCTTTCnTAT CTCTCATTTG GCATACTCCT 60  
 50 TTTTCCATAT TTTCCACTTT CanTACAGTG AATTACATG TAATTTTACA AATACAATAG 120  
 GAGTGACAAA TGGAATATAA CACTTATCTT TATAAAATTA TTTTATATAT TGaCGCACTT 180  
 AAAACAATCT ACAAATAAAA TTATTATTTT TAGTTTTCAA TGAATAATTC ATTCTTATCT 240

ATTTAAAAAT ACATTTAACT GC

322

(2) INFORMATION FOR SEQ ID NO: 1156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 777 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1156:

GTTTCCAAnG	GAAnGnGAAA	AGCGTCAACC	AATGTAAC TA	TTTAAAGTCA	AAGTGT TTGA	60
CCAAATTTGA	CTTAATATGT	AAAATAATGA	GTAACAGTTA	TTACAAGGAG	GAAATATAGA	120
TGAATTTAAT	TCCTACAGTT	ATTGAAACAA	CAAACCGCGG	TGAACGTGCA	TATGATATAT	180
ACTCACGTTT	ATTAAAAGAC	CGTATTATTA	TGTTAGGTTT	ACAAATTGAT	GACAACGTAG	240
CAAATTCAAT	CGTATCACAG	TTATTATTCT	TACAAGCGCA	AGACTCAGAG	AAAGATATTT	300
ATTTATACAT	TAATTCACCA	GGTGGAAGTG	TAACAGCTGG	TTTTGCGATT	TATGATACAA	360
TTCAACACAT	TAAACCTGAT	GTTCAAACAA	TTTGTATCGG	TATGGCTGCA	TCAATGGGAT	420
CATTCTTATT	AGCAGCTGGT	GCAAAAAGTA	AACGTTTCGC	GTTACCAAAT	GCAGAAGTAA	480
TGATTCACCA	ACCATTAGGT	GGTGCTCAAG	GACAAGCAAC	TGAAATCGAA	ATTGCTGCAA	540
ATCACATTTT	AAAAACACGT	GAAAAATTAA	ACCGCATTTT	ATCAGAGCGT	ACTGGTCAAA	600
GTATTGAAAA	AATACAAAAA	gACACaGATC	GTGaTAaCTT	CTTAACTGCA	GAAGAAGCTA	660
AAGAATATGG	CTTAATTGAT	GAAGTGATGG	TACCTGAAAC	AAAATAATTC	AAAGTAAAGA	720
GTAGACTAAG	CnGTCTGCnC	TTTTTGTATG	AGTAAACCAA	GGTGTCAATA	ATTTGTn	777

(2) INFORMATION FOR SEQ ID NO: 1157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1157:

TAATGTTGGT	AAATGGGTTA	AGGCTCAAGG	TCGTATTGAA	GAAGATACAT	TTATTAGAGA	60
TTTAGTTATG	ATGATGTCTG	ATATTGAAGA	GATTAAAAAA	GCGACAAAAA	AAGATnAGGC	120
TGAAGAAAGC	GTGTAGAATT	CCACTTGCAT	ACTGC			155

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1158:

GACTGGTAAA ATTTACTTGC AAGTAAAGCT AAAAGGTCAA ATAGATAAAG AACAACTTGT 60  
 TTTTCAAAAT GACAAAAATG AAGAATTTCC TTTTGTTATA AAAGATGAAA AGGATGACAC 120  
 AATAGTAAGA ATTTTAATTG AACAGCATAT GGATAAAATC AATATGCATG TTAAAACGTT 180  
 GGCTGAAAAG AAAAATCTAG ATAACAAAGA AATGGTGTAT TCTATTCATT TTAAAGAGAA 240  
 AAAAGTACAA CATGATGATG CAAAAGAAGT GCCTTCAAAA CATCAAAATC AAGAAAATAA 300  
 TCAAGATCAG CTTAAAnAG ATATTGATGA CAAAnAAGAT AGTCAAAAAT CAGATACTAA 360  
 GGGAAAAGACC TACTAGCCTT TTTACTGGAA AAAGGGTTTA 400

## (2) INFORMATION FOR SEQ ID NO: 1159:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1159:

GTTGGTACAG TGTTGAGTGG CTTTGAATAT CGAACACAAA AAGAAAAGTA TGACAATTTA 60  
 TATAAATTTT TCAAAGATAA TGAAGAGAAA TACCAATATA CAGGCTTTAC AAAAGAAGCA 120  
 ATAAACAAGA CGCAAAATGT CGsATATAAA AATGAATATT TTTATATCAC TTA CTCTCGTCA 180  
 AGAAGCTTAA AAGAATATCG TAAGTATTAC GAACCATTsA TTCATAAAAA TGATAAAGAA 240  
 TTTAAAGAGG ATGGACCAGC CAGAAAGAGT GATTACGCGC TATCAGTCAG TACACATGTT 300  
 AGTCCAGGAA TTTCTAGCAT CnGTGTGTGA ATGAnGGGTA CTTTATn 347

## (2) INFORMATION FOR SEQ ID NO: 1160:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATAGTTATTA ATTAGTAGAA TGAGGATATT TAAATATAAA GGATAGTGTT GAACTTATGG 60  
 ACATGAATTT CGATTATACA TGAACGGTGT TGTAGAACAA GCAAGGAATG AAATTGAATC 120  
 5 TCGGGGATAT GAGCAATTAA CTA CTGTCAGA AGATGTTGnA AAGTCCAAGA TGGnCACCTA 180  
 GTTATGATCA TCTGTATGTG GTG 203

(2) INFORMATION FOR SEQ ID NO: 1161:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1161:

20 AATTTTCChT TTCCATTGAC ATAACAATAT TTAATGGGGC CCAGTTACAG GAAATATCAG 60  
 TTTAATTTTCG TCTTCAATAC CATAGTCATA ATATTGAGTT TCTTGTGTTG GAAAATTTCC 120  
 25 TACATAGTTA CTCATTTTAA TTTGTnCAAT GTTTGAATTC GGAGGCACTC TGTTAGCATA 180  
 TCTTTAAACA TTAAATATGG ATA 203

(2) INFORMATION FOR SEQ ID NO: 1162:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1162:

40 GCCATTTTGT TGATAAAGGT ATACTAAAGG TTATCGTTTT GAAATTTTAA GTAAC TAGGA 60  
 TATGTTTCGT GTTATAGGAC CGGAATTTGT GGTATACGGT AAAATTTTAA TGCTATTGGA 120  
 ATTTTAAAA ATGGAAAAAC ATGGACATTn AAATTGGAAT TTCATAATAT GTCCTAATTG 180  
 45 GACTTAACTT GTTGGGAGTT CATTTTACTA TTTnTATGGT 220

(2) INFORMATION FOR SEQ ID NO: 1163:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 409 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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TTCACGTGCT TTGCCATCTT TTAAGAAAAA CACAGAAGGC TTTTGCATTT GATTGTAATT 60  
 GGATGCCATA GAGTAATGAT ATGCACCAGT TGATAATATA GCAAGATAGT CTCCACGTTT 120  
 5 GACTGGATGA AGGTAATTTA GCGTCTTTAA TAATGATATC ACCAGACTCA CATAATTTTC 180  
 CAGCTATAGT TACACTGtCA TCTGCTTCTT CATTTCTATT AACAAGCAAT GCTTGATACT 240  
 TTGCGTCATA AAGTGCAGTT CTGATATGAT CACTCATACC GCCATCGATT GAAACATATT 300  
 10 TATTArTCTC TGGAATTTCT TTAATGGtTC CAACTTCATA TAAAGTAACG CCAGctTCAC 360  
 CTACAATTGA TCGTCCCGGT TCAATACCTA TTTCTGGTGC ATCTATACC 409

(2) INFORMATION FOR SEQ ID NO: 1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1164:

CTAAATAATT GTTTAAATTT TTCTTTACTA TTTAGACTCT TTCGTTTGCC ATGACTTTGT 60  
 TGACTTGCAA TGATATGAAC TTAATTTTTG CGAAAAAAGG AATCTAGATT CATATATTCG 120  
 GTAAATCTAC CTTCTTCATC TTTTGAAC TGTAAATTCTA GCAATTCACG TTGTATCAAA 180  
 30 TTTTGAATAA CCATTGTAAT ATCACGTGGT TGCATAGTTG AGCCCTTCTG AAGCAATTCA 240  
 ATTGAAGGCG TTTATTTGAG TTTCGAAGCA TAAATCAATT TAAGCAAAAG ACTAAATCTG 300  
 35 CTCATCTAAA CCTAAGTCAC GTAAGGTCTA ATAATCnCTC GTATCACTAC GGTCTGCTTT 360  
 AATGATATTA nCCAGTnCGT GCCCCTTTAA ATTAACCA nA 400

(2) INFORMATION FOR SEQ ID NO: 1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1165:

TCGTGATTAT TATTAACATT TTTTAGTAAT TGATAAAAAT CTTTCTCGC TTCTGTAGGG 60  
 CTAGTGATAA TCATATAAAC CCTCCTTTGT TTTCTGTTAC GCTAATTATA GCGTACGCAC 120  
 TTGAGTACGT CATATTACCA ACGAGTTCAT CGTATnCTTA ATACCTATAT GCTATCGTTC 180

GGACACACTA CCGTnCCCTA CCGCTTAACC ATTTTCGGGC TTAAATATTT TnAAAATTTT 300  
 GTGAGGATCC GCTTAAAAAA CCCATA 327

(2) INFORMATION FOR SEQ ID NO: 1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1166:

TTAGGATTTT AAAAATATGT CAGGTTTTCT AACATAAAGC TAAAAACATT GATATAACTG 60  
 CGATTTTCGAC TTCTAAAACG aCATrAAACA ATCTACAGCT AAAATATTTT TTCAATTTTT 120  
 AAAAATAATC nGATAAATCT CCGCAAAA 148

(2) INFORMATION FOR SEQ ID NO: 1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1167:

nAAGGTTATC GCTCGTAAAG ATGTTGTTGA AGAAGTATTT GACGACAGAG ATGAAGTGGa 60  
 TTTAAGTACA GCGCTTGTTA AAACCCTGCA TATGAAATTG GTGTATTACG AGAAGAGTAC 120  
 ACTAAAGTTT TGGTCGTGTA GGTCTCAGCA GCGAACAGCA GTATGCACGT CTnCGTGTGC 180  
 TGACGTGAAT TTTATTTGAG GATTATAGAC AAGAGAGACA ACTTACTGGA TTTTGCCCTG 240  
 TTG 243

(2) INFORMATION FOR SEQ ID NO: 1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1168:

TTATATACTA CTATAAAGTA ATCCAACCTCT CAAGAAGGTA AATGGGCAAT CAAAAGCTAA 60

CTACGATATG ACGCACAAAT GTTTAGGGTA GGTGTTGACA TGTGTACAAA AACCAGCAGA 180  
 AAATGGTTGT ATTCTTAGGG AAGCATTCAT CCTGTTTGTT TATGGATTCA TGTACGTTA 240  
 5 CGCAATATGT TTTTATGTAG CACAGCGAAG TTACAAGTTT ATACGCTATA TATCCnTTGA 300  
 TnATAAGCAG ATGAAAnCGG C 321

## (2) INFORMATION FOR SEQ ID NO: 1169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 191 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1169:

20 TCTACATATA AAATTACTCT AAAAATATGT ATAGTCATAA ATTGTTGGTT GATTTAATTA 60  
 AAAGTATGGA AATTAAGGGG CTCTTATGTA TATAAAAAAA TGAATTATGA TAAATGTAA 120  
 GAnAATATTT AGGGTCGATT GGAGAGATAC CAGTGGTACC AATTAGAAGA CGACAGTTTA 180  
 25 ATGTTACCAT A 191

## (2) INFORMATION FOR SEQ ID NO: 1170:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1170:

AATGTGGCAA GGATGTGTGA TATGACTACA CATTTAATAT CATCCTACAT AATAATTTTG 60  
 40 CGCGCCAAAT TATCACACAT ACCACACCTA CGATAACAAC CAGCAAATAA GGAGATAGCT 120  
 ACACGTATTT ATCGTCCAAC GCACTACTAT ATGTTGTTGn ATGGGCACAA GTTACAAGTG 180  
 CTGCGCGATA nCAAAAGGTA TACCCCTAAA ACGTCCCAA AAnAATCGGTT GCCCTCTAAA 240  
 45 TTGTTTGTGT GCCATGATTA GTAAGCTCCT ATGTTAGAAA CAAATTTTTA ATATGTATAT 300  
 TAG 303

## (2) INFORMATION FOR SEQ ID NO: 1171:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1171:

5 AAAAAAGGTGA GAAGACAATA ACGnACGCCA AACTAAAAA ATCCATTAAC TGGAGAAATT 60  
 ATTAGTAAAG GTGAATCGAA AGAAGAWATC ACAAAGATC CAGTTAATGA ATTAACAGAA 120  
 10 TTCGGTGGCG AGAAAATACC GCAAGtCATA AAGATATCTT TGATCCAAAC TTACCAACAG 180  
 ATCAAACGGA AAAAGTACCA GGTAACCAG GAATCAAGAA TCCAGACACA GGAAAAGTGA 240  
 TCGAaGAGCC AGTGGATGAT GTGATTAAAC ACGGACCAA AACGGGTACA CCAGAAACA 299

## (2) INFORMATION FOR SEQ ID NO: 1172:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1172:

25 CCATAGCACC ATACCATAA CCAACCCGGA TCCACTAACA AATAAGTAAT AATThACACG 60  
 TAAAGAAGTA AATAGTTTGT TTAGTTTTTT ATCAACATTA TCAATGTTTT CCTCGACAGA 120  
 30 CACTGGAATT TTAACGATAG CTGTACCATT TGTAATTGAG TAGTTCGTTA TTTCACCCAT 180  
 ACTACTATTT GGTAAAATTG TTAATTCTCC TGAAATTGTA TTGATTCGTG TTGAACGAAG 240  
 TCCAATTGAT TTAAGTGTTC CCTCTGCTAC AGTTGTACCA CCGTTATTTA TCTTAACATA 300  
 35 ATCACCTACA TCAAATTGGC TTTCAAATAT AATAAGAAT CCTGTAATTA CGTCTTTAAC 360  
 TATAGTTTGA GCACCAAAC CTACTGCTAA GCCTACGACA CCAGCACTGG CAATTACCCC 420  
 TTCAACACTA ATGCCAAATT TACTTAAAT CGTCGTAATA ACTATAAACC AAACGATATA 480  
 40 CTTCACTACA TTTTGAACAA GAGATATTAA AGTTTTAGAG CGCTTTTTGT TACTCTTTTT 540  
 ACTTTTATTT TGAATCTTAA ATCCCTGTTT AATCATTTTA TTCAGTATTT TAATAACTAT 600  
 GAGGGCTACG ATAATATAAA TAACAATCAT AGCGATTTTA GTTGCAATGT TTTCATATGT 660  
 45 TTCTATTTTT GTTAATGGCT CAAATAGAGA TGAAATAATA TTCATGACTT GATTCATGAT 720  
 AAGCGTTACT CCCTTCTATA TGATATATCA ATATTGtATT CATATTTtga TATACTTCCC 780  
 50 AACCTACGAA AGTCTCAATA TATCTAGAAT CAAATGGTCA C 821

## (2) INFORMATION FOR SEQ ID NO: 1173:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1173:

CCC	GAA	ATTA	AAATA	ATAAT	GTATGA	ATTT	TTAAAT	TATGA	TTTAA	ACGTT	TTCAG	TTTTT	60
ATG	AAA	ACGC	ATGC	ATTTTA	CAAATA	AAAAA	TGGTAC	GATG	GCACT	GGTTA	AAACG	TTTTTA	120
CTA	AAAA	ACAA	ATCAT	GAGGT	GTATA	ACATG	GCTGT	CTCTT	GATCAG	ATCT	TGATC	CCCCTG	180
CGCC	ATC	AGA	TCCT	TGGCGG	CAAGAA	AGCC	ATCCAG	TTTA	CTTTG	CAGGG	CTTCC	CAACC	240
TTCC	CAGAGG	nCG	CCCC	CAGC	TGGn	CAATTC	CGGTT	CGCTT	GCTGT	CCATA	AAAC	CGCCCA	300
GTCT	AGCTAT	CGCC	ATGT										318

(2) INFORMATION FOR SEQ ID NO: 1174:

20

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 206 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1174:

GTTT	TAAAGC	GGTT	TATAAG	GTAA	ATATGC	AATATT	TATAA	ATAT	CTTCTT	CAGAA	CTAAC	60
CGA	ATCTCTT	AAACT	CATCT	GTTT	AGATAG	CGTTT	CAAAT	TGATA	AGTTT	TAATTT	TAAAC	120
CGTT	ACAGTT	TTAG	CTGACT	GCTG	TAAATTT	ATTTG	ACGTG	CAGCT	GTTTT	CCTGA	CAATH	180
CCAT	ACTGTC	TTAA	AnCTCT	GCAT	CA							206

35

(2) INFORMATION FOR SEQ ID NO: 1175:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 653 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1175:

TCTG	CATCAT	GATAT	TTTAC	ATCAT	CACTT	ATAAGA	ACGT	CACCT	ACATT	TAACT	TTTCA	60
TCTA	AGCTC	CAGCA	GAACC	TGTAT	TAAATA	ATGAC	GTC	CG	GTTTAA	ACTT	ATTAAT	120
AATG	TCGTAG	AAATTG	CAGC	ATTA	ACTTTT	CCAAT	GCCAC	TTTGG	GTAAT	CACTA	CTTCT	180
CTAT	CTTTTA	AAATG	CCAGT	ATAAA	ATTTA	ACATG	TGCAA	CTGa	AATTTT	GCTTA	ATTGT	240

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TTTTGATTCA CCTCTTTTAA AAAATCCTAG CATTGTGTAT TTTATCACAT TTTAATCACT 360  
 ACAACGACAA GTATCATGAT TTTCATTACT GTATAAACT TTTGCTTTAT TTTTATAAAA 420  
 5 AGCTCTTTCA ATAACCTGGT ATCATAAATA ATTATTTTTG AACTCATAAC AGTGAATTCG 480  
 ATGCTTCTAA TTTGTCTATT TTTCAAAAAC TAATCATATC AATTACATCA ACCAATCGTG 540  
 TCAAGAACT TTATTAAATA ACAGGAAAT GATATGTTA AAATAATAAT GATGAAATAA 600  
 10 GAGGATTTTA CAATGGCTGA AAATAATCAA AATAGTCTCG TAACAAAGAT AGC 653

## (2) INFORMATION FOR SEQ ID NO: 1176:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1176:

ACATGGCCGT TnGnATCAAG ATCGTCAACG ATTGATTGGT ACAATTGAAG TGCCTATGAC 60  
 25 ATTGGCAACC GTTGGCGGTG GTACAAAAGT ATTACCAATT TGCTAAAGCT TCATTAGAGC 120  
 TACTAAATGT AGAGTCAGCA CAAGAATTAG GTCATGTAGT TGCTGCCGTT GGTTTAGCGC 180  
 AAAACTTTGC AGCATGTCGC GCGCTTGTGT CAGAAGGTAT TCAACAAGGT CATATGAGTT 240  
 30 TACAATATAA ATCATTAGCT ATCGTTGTAG GGGCAAAGG TGATGAAATT GCTAAAGTAG 300  
 tGAAGCTTgA AAAAAGAACC CCGTGCAAAT ACACAAGCAG CGGAACATAT TTTACAAGAA 360  
 35 ATTAGACACA ATAGTAAAGG CGATAGCGAT TAAAGAAAGT TAAGTCAGTC 410

## (2) INFORMATION FOR SEQ ID NO: 1177:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1177:

CATCAAGATA ACTACGGTTA TAATCCAAAC GACCCAACAT CATATACTA TACTTACACT 60  
 50 ATTGATGGCA CAAGGTAAT ACCATTACAC ATGGGAAAGG TAACTnGCAT CCAAGTCAAT 120  
 TAAACCAAGA TAATGGCTAC TACAGC 146

## (2) INFORMATION FOR SEQ ID NO: 1178:

(A) LENGTH: 225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1178:

10 TGTTCCTGGT GGAACCTTGG TTTCTTAATG TCATTCCAAA TTGCTGTATA TTCATTCAAT 60  
 GGTATTGAAC TTATAGGTGT ACTGCTGGTG AACGAAAGAT CTGAAAAAAC CTTACCGAAG 120  
 CAATTAATAA TGTAATATCC GTATTTATAT CTATATCGTG GTATATATAAT ATGTCATCAA 180  
 15 CTGGATATAC GTCAATAGAC CTTCTGTAACC TTAATATCGC GACAT 225

(2) INFORMATION FOR SEQ ID NO: 1179:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1179:

TGTACGCATA TGGTATCACT TGATGACCAA TTCACCTTGT CGAGAATAAC GTTATTTAAA 60  
 30 GACATTGATT TAAAGAATTG GTATTnCGTT AATTGTATTA GACTTTTCAC AGAAGTAGCG 120  
 ACAACAATGA TTTTCATCGTA ACACGTGCGC ATATnAAGCA TGGGAAAAGA CATGGnCTAT 180  
 TGACCTGGCC TTTTGTGCAC TCGTACGATT GGTCAAACGT GGCTATATTG AAAGTTTGAA 240  
 35 ACAAGATGCG ACGGACACAC ATGCACGGGT GGGGATAGAT CTTGAGTCTT ATTGAGACGC 300  
 TGTGACTGTG GCTGACATC 319

(2) INFORMATION FOR SEQ ID NO: 1180:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 654 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1180:

50 TTTTATCTTG GTTTTGAAC AGATATGTGT AGTCAGGTAT AACATAATCA ATCCCTAATA 60  
 AGTTATCATC AGGGAATTTG ATACCTGCAT CGATAATGAC AATTTCGTCT TTATACTCAA 120  
 CTGCATAAGT ATTTTACCAG ATTTACCTA GACCTCCAAG TGCATATACA CCTACTTCAT 180

55

TTCGTAATCT AAATGTGCGC CCTCTAATTT AGTGATAAAT TCGATATTAA AATTACGATC 300  
 TTTCAAGTAA CGACGTACTT GTTCTTCTGT TTGAGCTTCA ACATAAAGTG ATTGTGTATT 360  
 5 TTCACGCACA ATTACCTCGT CTCTGTTATG TTGATAaAAA ACTTTAAATA CTGCCATGTT 420  
 AAAAATTCCT CCTAAGAATG TTTGTYTAAT TTATTGTTAA CCCTAGtAAA ATCGTATTGG 480  
 AGTATATATC GATAAATTCA TTCCAATCAT CTCTATAATG TAACTTAATA ACGATTTGGT 540  
 10 TAATAACTAG GTTCATCATG TCGTTCATTT TAAAAAATTA GTGAAATAAC ACTAAAATTT 600  
 CAGTTAAATC TTATTTTACA TGATGAATGA TAATAAATAA AGCAGTTTAT CTCA 654

## (2) INFORMATION FOR SEQ ID NO: 1181:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1181:

CGGGTATATT ATAGACAACG TTTAAGGACT TCTTTTAAAC TAACTTGTTA AATGTTGCTG 60  
 TATTTTTGTA TTCAACACTG TAATATAGTT CTTCTGACGC TGATGCATTA CTCATTGTAA 120  
 TAGATATTAA AAGACTCAAT ATTATTAAaAC TAATAATAGC GCGCTTTATG ATTTTCATAT 180  
 30 TCTAATCTCA AATGAATTCC AGAACTTTAT ATGGTTCAGG TGCGACAACA T 231

## (2) INFORMATION FOR SEQ ID NO: 1182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1182:

TAAGTTTATT AAGCTCTTGT CCGTTAGCAA TCACGCTACC GCTAGAAATT TGGTCAATTG 60  
 45 AACTTAGTAC ATTTAATAAG GTTGTCTTAC CTGATCCAGA AGGCCCCATA ATCGCACGAA 120  
 TTCGCCTTTT TGTATGTCAA GTAATATCTT AGGCTGAATG GTGCTTTACG AGTTTGAACA 180  
 GTGCCGAAAA CGCAAGCCCC TTGATATCTT AAATGTGGAG ACTACAACnC ATCAGTGnCA 240  
 50 CGGGA 245

## (2) INFORMATION FOR SEQ ID NO: 1183:

(A) LENGTH: 490 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1183:

10 AGGTAAAGAT GATGGTGTAG AAGTTTATGT GCATTGCGAA GATCATGGCA TTGTATTTAA 60  
 TGCAAGTCTA CCTTTGTACA AAGATGCCAT CCATCAAAAA GGATCAATGC GTAGTAATGA 120  
 CAACGGTGAT GATATGAGTA TGATGGTGGG TACAGTGCTG AGTGGCTTTG AATATCGAGC 180  
 15 GCAAAAAGAA AAGTATGATA ATTTATATAA ATTTTTAAAA GAAAATGAAA AGCAATATCA 240  
 ATATACAGGT TTTACTAAAG AAGCAATTAA CAAGACGCAA AACGTCGGGT ATCAAAATGA 300  
 ATATTTTTTAT ATTACATATT TATCAAGAAA TTAAAAGAA TATAGAAAAT ATTACGAACC 360  
 20 ATTGATACAT AArcaATGAT AAAGAGTTtA AAGAAGGTAT GCAACGAGCT AGAAaAGAGC 420  
 TAAACTATnC TGCTAATACA AATACTGTAG CAACGTTGTT TAGTACGAAT GATGAAAGGA 480  
 ATAGAAAAGA 490

(2) INFORMATION FOR SEQ ID NO: 1184:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1184:

35 CTCGCATTTT AATAAATCAT ACTCTTCTTT TCTTGATAC GAATTAGAAT AACTCGCGAG 60  
 ACCTATAAGT CTCTTTCCTC ACTAGATAGT TTATACTTTT GGTCnGTTGA AGTCAATAAT 120  
 40 TTTATCTAAA GCTATAAAAA ATCTTTTGAT AGC 153

(2) INFORMATION FOR SEQ ID NO: 1185:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1185:

TCATTTATAT ACTGTATCAC GCTATCTTTA GTATGTGTGC ATnATCATTG GTTAGTGCCT 60

AATGAACGTT ATATTTTAAT TCATGATTTA CTAAGACCAA CAAT

164

(2) INFORMATION FOR SEQ ID NO: 1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 143 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1186:

CACAAGTGAC GTCATATTAT AAAAGTCACT CGTTTGCGA TACGTTCTGT CTAAGAAATA 60

GCGACGTGCA ATTTTCATATT TTnTATAAAC ATCCGTTGAA AAAGGACATA AAACCATGCG 120

TTGAACCAGG GTCTATACTT TCT 143

(2) INFORMATION FOR SEQ ID NO: 1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1187:

CGTACAAGTT AAAACGTTTA TACGATTACG AAAAACCACC GAAGAGTGAG AAAGATCCAA 60

TGGTTGTATA TGCAGTAAGT GCAGGATACA AATGGTTCTT TGCTTATCCA GATGAACATA 120

TAGAGACTGT TAATACATTA nCAATCCCTA AAGATGTCTG TTTATTAGCT CAGCATGAnC 180

ATACAGTTCG GTCACATAGT GTCAATTCA 209

(2) INFORMATION FOR SEQ ID NO: 1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1188:

TTGGAATCGC TGTCGACGGA TAGCAACCTG GATTGTAAAA ATAATGTTGG CTTTAAAAAT 60

ACCGTGCGAA TATTAAATGA ATAATCGCTG CTGAATATAC ACCCAATGCA CATTGAACTA 120

ACATAAnCCC ATTTGACTCA TCTACGCCCA CTATTGGCTT TATAGTCACT GAACTAAGCT 180

TAT

243

## (2) INFORMATION FOR SEQ ID NO: 1189:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1189:

CACCAGGCAT TACCATACCA GCACTCATAC CACCAATCAC KCTCGATAAC ATCAATACCG 60  
 AAAAATTGTG GCCAACTGCA AACATAAATT CTGACACTGA AAACAAAATT AATCCTATAC 120  
 ATATAATTAA TTTCTTCCCT AATTTGTCAG CTAGCGTACC ACCAAACGGC GATATAATCA 180  
 TTTGAGATAA CGCAAAGCA GCAACTAGTA ATCCTAAATC ACTACCAGTT AATCCCAAAT 240  
 CTTTTAAATA AACAGGCAAG ACTGGTATTA CTAAACCGaT ACCTAAAAAA ATCAAGAAAA 300  
 TATTAAATA TAAGACAAAA ATCTGTTTAT TCATATGCTC ACCTCTTTTT TCTCCATGTC 360  
 ATGCTTAAAG CTGTTATTCT TCTTTCCAC GACAGATTGC AATTCATGCT AAATATTCGT 420  
 AAAAAGTTTC TATATTGTAT TACAACATTG CTACATTTGA CAATATTTTT TCTTTGTAAT 480  
 TATCACTATn TTCCATTAA TTGTATAATT AATGACATAT TnnAATA 527

## (2) INFORMATION FOR SEQ ID NO: 1190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 889 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1190:

AAAACGTGGC AGTAATTCAG TGTATGTTCA ATATGATGAT ATTATGTTTT TTGAATCATC 60  
 AACAAAATCT CACAGACTCA TTGCCCATTT AGATAACCGT CAAATTGAAT TTTATGGTAA 120  
 TTTAAAAGAA CTGAGTCAAT TAGATGATCG TTTCTTTAGA TGTCATAATA GCTTTGTCGT 180  
 CAATCGCCAT AATATTGAAT CTATAGATTC GAAAGAGCGA ATTGTCTATT TAAAAATAA 240  
 AGAACACTGC TATGCATCGG TGaGAAACGT TAAAAAATA TAATAAGATA ATAAAGTCAG 300  
 TTAACGGCGT ATTCAATTGT AAATCTTGTT GGATTTTAAC AAGATAACTA GCAAATGCAC 360  
 TGTATAGCTG GCTTTTTAAT TTTATTAACA AAATTAAATA TGACGCGTGA ATTAAAAAAT 420

CTCTACAATC CTATGGCGCA ATTTTAAACA AAATATACTA AATtTGAAAT TGACAGTTTC 540  
 CATAAATAAA ATGCTATAAT TTCCTACTCC GTGAATCTTA TTTTGTTTTA AAAAACAGTG 600  
 5 TAGCACAAGm TTCAACTTGT TTCCTACACT GTTTTATAAA TGAATTATTT AAAATGCTTG 660  
 TTCAACCTCT TGTAATGTTG GCAAACTATT AATAGCACCA TACTTCGTTG TCACTATTGC 720  
 AGCAACGCGA TTGCTAAACG CTAAAATTTT CTCACCTTCA TTTTCAAATA ACTGAGTTAA 780  
 10 ATTTAACACA TCGGTTGCTA AAATCCTGCT AATAACTGCA CCAATAAATG CATCCCCTGC 840  
 CCCAGTTGTA TCAACAGGTT TTACCTTATA GCCACTATGA TAATGATTA 889

(2) INFORMATION FOR SEQ ID NO: 1191:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1191:

25 AGTTAAAGGC GTTGAATTAA TGGCCTTCCC ACACATGACA TATAACAAG CGTGCGCCTA 60  
 TGGTCTGATA ACCAGATACA CGTTTGAATG GATTAATTGC GTTCTCAATT AGGCGTGATA 120  
 TGGCTTTAAA GATTThAGTC TGTGAAATG ATGGTGAATT AAAGCATTGC GCTAAAGGTG 180  
 30 CACTGACAAT ATCTCGTAAA GATATGGTGC TTTAACAGAT TTGTAACATC TATGGTCTAA 240  
 nGATACGGGG TTAA 254

(2) INFORMATION FOR SEQ ID NO: 1192:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 189 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1192:

45 GGCTCATAAG TTACACCTAA TGCATCTTCA TCTGGAAGCT GTGGTTTATC ATCTTCTAAA 60  
 TCAGCAGTTG GCGTTTTTTC ATATAATTCC TTTGGCGCAC CAAGATACGC TAATAATTGA 120  
 GCTGTGTATn CTAGGCATCC ATACCGTATT CGTTAAACCA GTATATTTC GCTGAATGAT 180  
 50 CTGTCCTAC 189

(2) INFORMATION FOR SEQ ID NO: 1193:



- (A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1193:

10 TTGATATTGA TCGATGACCG GTGATGTGAA ACTGAACTG ACCAATGAAT GAAAAAATGG 60  
 GCAATGTTTT TGACAACAAT GGTCAATTAC CAAATAAAAA TATTGnCACC ATTAATACCT 120  
 GnCAAACGTG TTTGTTCCCTA AACCTAAAAT GATAAATCCT ATTGAGATTA TGGACTTGGT 180  
 15 AAGCTGCAAT CTTTTTAATA TCTTTATAAG CAATG 215

(2) INFORMATION FOR SEQ ID NO: 1194:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1194:

AGAATTTGCh ACTGGTTTAC CAACGCATCT ATGTTCCGGTC GCTATACCGC ATACAGATGT 60  
 30 CGAACATATT AACCATAGAA CGTAGGTGTG GTGTTCTAGA AAAAGAAGTG CCGTTATTGA 120  
 AATGGGACAC TTGATCAACA GCCGAGTGAA ATCGTTTT 158

(2) INFORMATION FOR SEQ ID NO: 1195:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 180 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1195:

45 ACTGATTGCC GTGTCTGTGG TTGATCATTG ACTAATTGTT GGCCATCATT GGnTTCTTGG 60  
 TCTAATAGTC CTCTTGCTCC TGCCTCGTAA CATTGATGCC AATCATGCAC CACAGCCTTT 120  
 CGGTTTCATCA TAACATTTCT GCCAATGTCT CTACATGACA CGGGCTCATA TTTCTTTCTG 180

50

(2) INFORMATION FOR SEQ ID NO: 1196:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1196:

5 GTTAAAGCGA ATTATTCACA ATATAAAAAA TCATCTGATC AAGTCGTATT AGAATTAGGT 60  
 ACAAATGGCG ACTTTACTGT CAAACAGCTC GACGATTTAC TTAATCAATT TGGaAAAGCC 120  
 AAGATTTATT TAGTTAATAC ACGTGTCCA AGAaTTmTG AGGgCAAATG TAAATCGATT 180  
 10 ATTaGCTGAC GCGGgCGAAA CGGAAGTCCC AATGGTCACA TTAATTGGAT TGGGTATTAG 240  
 GCGCTTCACA AGGGACCTTG GTGGAATATT TTTG 274

## (2) INFORMATION FOR SEQ ID NO: 1197:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1197:

25 ACGTAACCTA TATTCATCTC TGTTCCTCAAT AATAATAACA ATACATAACT GATATTAGCT 60  
 GTCTTTTCATC TCTAATTAAT ATGCGTCATG AGCTAATATC GGTTATTTTTT TTGTGTCAAA 120  
 nAATTTTTTAT TTTATCTCTC CATCGCATTATTG 154

## (2) INFORMATION FOR SEQ ID NO: 1198:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1198:

40 AATCCTCACC CGTAATAAAC TCGTTTTGAA TCGGTTGTTC GAACTCACGG TATATTAAAG 60  
 CAATATCCTC TAACTTATTT TTAGTTCGAG TTTGCATATT TTTATCAGCA ATAAAGTGTT 120  
 45 CTAAATGTTT AGGCGTTACT GCATATTTTT TAAAATCTTG AATTTGTTCT GTTAATTTTT 180  
 CACTAAACCC ATAATATTTT GCTTGTGATT GATAAAGTTT TAAATACTTT TGTGTTChT 240  
 GAACAATGn 249

## (2) INFORMATION FOR SEQ ID NO: 1199:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1199:

TTGGTAAAAA TCGACATCAA ATACTAAATC TGATCCATCT GAATCCCATG TTTAAAACCG 60  
10 AACTTGTGCA TTAATTGTAA AGTTCAAACCT CTTTCATCTTC ATAGATCGCG ATGCGTCTTT 120  
TAATTCCTTTA GGTGATACTT TGTAGATCTA TAACAAAATT AnCTA 165

(2) INFORMATION FOR SEQ ID NO: 1200:

15 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 236 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1200:

25 TTATTAGCGA TTAAAAATAT GTCCTTTTTT AATAAAGGAG ATATATGTTT AATTGGATGT 60  
CAACATCGGA GTCATTGGCG AAAAATAGGG CTGCGGTCGA TGGAGTTCAA AACTATTTTA 120  
ATGCATTACA TGTTGTGAGT nAAGAGCAGG CGTACTTTTC TTTTCAAGGA TGTGACATAT 180  
30 CACAGAGCGT ACAATAGAAA CTCAGATACC ATTACATGGA nAGTCCGCGT CCAATG 236

(2) INFORMATION FOR SEQ ID NO: 1201:

(i) SEQUENCE CHARACTERISTICS:  
35 (A) LENGTH: 146 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1201:

TAATGCTAAA CAGTATTATG GAGATAATGG CTTAGTTCAA ATTTCTGATG nAAGTCAACA 60  
45 CTTCTAAAAT TTGTAAATGA AGCATTAGAC AATAACGAAC AATCAGTTGA AGATTACAAA 120  
AATGGTAAAG GCAAAGCTAT GGGCTT 146

(2) INFORMATION FOR SEQ ID NO: 1202:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 385 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
55 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1202:

ATTGATGATA GTATTGATGG TAATACCATA AACATACAGC ATTATCACAA GTAAAAGTAA 60  
 5 GCCTAAATGT CCATAAAATC TACTTGTCAC AATATATGTC GGTATTATCG TAACGGGAAG 120  
 TCATTTTCGTA CTTGATTAAA CTTTTGTGTA ATTGCTTTAG TACCTTCTAA ATACCTGGTT 180  
 GATGAGACCA CATACTGATA CCACCATAAC CATAAACAAA AGGTACACCA GAATTGGGCA 240  
 10 TACTTCTTAT TCCATCCAAA CCTCCGTAAC CTAATTGCTA CGGGTAATAT TCCAGCACAC 300  
 TAATAGTATT GATGTAATTA ACTGAACGGC CGCTnGATAA TAAGTCTTAC AGTCTTAAAC 360  
 GTCCATGCGC ATCnTnACCC ATTCA 385  
 15

## (2) INFORMATION FOR SEQ ID NO: 1203:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 580 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1203:

ACATTGAACG AGTACAGAAA ACTTATTGnA AATAAAGGCT GTTAAAGATA AAGAAGAAGA 60  
 TACTTACAGA GGTAAGTATT TTGCGGAAGA AAGAAAAAAC GAAAAATTGG AAAAAGAAAA 120  
 30 TATAAACTA AAAAACAAAA TTTATGAATT ACAAACGAA GAAGATAACG AGGAGGACGA 180  
 AGAAGACAAG GAGGACGAGA ACGATGTATT ACAAATTGG TGAGATAAAA AACAAAATTA 240  
 35 TAAGCTTTAA CGGGTTTGAA TTTAAAGTGT CTGTGATGAA GAGACATGAC GGTATCGTA 300  
 TACAAATCAA GGATATGAAT AATGTTCCAC TTAAATCGTT TCATGTCATA GATTTAAGCG 360  
 AACTATATAT TGCACGGAT GCAATGCGTG AyGTTATAAA CGAATGGATT GAAAATAACA 420  
 40 CAGATGAACA GGACAACTA ATTAACCTAG TCATGAAATG GTAGGAGGTA TGAnAAGTGA 480  
 ATGATTTACA AGAGAGAGAA TTAGAAACAT TCGAACAAGA CGACCGATTG AAAGTAACTG 540  
 ATCTAGACAG TGCTAACTGG GTTTTTTnAG AACTnGGAT 580  
 45

## (2) INFORMATION FOR SEQ ID NO: 1204:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
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ATCGTATGGT TGAGGCGAAT TTAAGTGAAG AATTAGACAA CGAATCTTGA TGAAAAGAnA 60  
 ATGATTGGCT AAAATAGCAG CTAATCAAAT CAACGATAAT GAATGCTTAT TTATCGTGCT 120  
 5 GGTTCATCTA CATTGGAGC 139

(2) INFORMATION FOR SEQ ID NO: 1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1205:

AGGAGGATAT CAGaCTTACA rACTATTCTT TATCATACTG rAATTCAAAT AGACACCTTA 60  
 20 ATTGaAGaAG GCGTTGACGC GCTACTTTTC rAAACGTATT ACGACCTnGG AAGnGTTAAC 120  
 AAATGTCATT TCCACGGAAC GGGGAAAGGA AATACGGCGT TGCCAATCCA TTGCTCCAAT 180  
 TGAACCGGTT GCAAACACAA ATTGACTTGG TTGAAGGGGC AGGCATGCA 229

(2) INFORMATION FOR SEQ ID NO: 1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1206:

TCGACAAGTT TTTAACAGTT CGTTATTATA TGAATGTAAG TAAAAATTTT TTAGCTACAA 60  
 CTTACATATT ATAAATGCAT AAATTAAACA AAAAGGGGCG AAAAAAGTTG ACTCATTAT 120  
 40 CAGATTTAGA TATTGCGAAT CAATCAACAC TACAACCAAT TAAGGATATT GCTGCATCAG 180  
 TAGGTATTTT AGAGGATGCA TTAGAACCTT ATGGTCATTA CAAAGCTAAA ATCGACATTA 240  
 ATTAAAATTa CGCCAAGAGa AAACAAAGGG AAgTTGTTTT aGTTAACTGc GATGaGCCCC 300  
 45 ACACCAGCTG GTGaAGGtAA tCmACGGTTA CAGTTGGtTT AGCTGaTGcA TTCCmTGaGT 360  
 TaATgAAAAC GTTATGGTTG ccTTaGGGGG CCTGCCTTT 399

(2) INFORMATION FOR SEQ ID NO: 1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1207:

ATAACAATA CGATTTGTAT GCTACTTGTC TGAAGACAAC ATAAACAAT ATGTTAACTG 60  
 5 ATATTGAGGA TATGGGCTTT CAAAATCCAn TTCAAAAAG GTTATGTTGA AATATGACGC 120  
 GGTGTTGAA AGAGACCC 138

## (2) INFORMATION FOR SEQ ID NO: 1208:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 655 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1208:

AGTCGCCTAA CTTTTATTAT CAGTCCAATC AGTTTCATCA AGTATAAATG TTATTGCTTA 60  
 TTTTGTATT CTGGCGTAT TTTTGTCT TCTGCATAGC GCTCTGGATT TTTCTTATAA 120  
 AAATCTTGGT GATAGTCTTC GGCTTTGTAA AATTGTGACG CTGGTAATAT TTTTGTGCA 180  
 25 ATTGCCTTAT CAGCATTAAT CGTATTTTTA AGCTGCTCGA TATAAGTCTC AGCGAGTTCT 240  
 TTTTGATGAT CATTAGTGTA GAAAATAGCT GTTnATATT GAGGACCACG GTCTTGATAT 300  
 TGACCACCTG TATCTAATGG GTCAATGACT GAGAAAAATA TTTCTAATAA CTTATTGTAT 360  
 30 GAGAATAATG CAACATCATA TTGAATTTCa ACAGTTTCTA AATGACCACT CGTACCTGAT 420  
 TTTACTTGTT CGTAAGTAGG ATTTTCAATA TGTCCGCCCA TATATCCAGA AGTTACTTTT 480  
 TCTATGCCGT CAAAGGTGTC AAATGGTTTC GTCATACACC AAAAGCAACC TCCGGCAAAA 540  
 35 TAAGCTGTAT TAATATTCAT TTTTGACATC CTTTCCATTA GACCTTAGTA CGATTTATTA 600  
 AGAAATCACT TGCTTTTGA ATTGTTTTTA TATAACGTTA ATAnGnGATT ATnAT 655

## (2) INFORMATION FOR SEQ ID NO: 1209:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1209:

CCGnCCCCAA TGGAATTAC CTTTGGTnCC CCATTTTAAT TGTTAAATTA TTGGAGTGTT 60

AATCTCACTA TCTTCAAATA AGCTTGTGTA TAGTTTAACA GCTTCTTCAG CTTGGTTATT 180

AAACATTAAA AATGTCGTGA TTTTGGGAAT ATC 213

(2) INFORMATION FOR SEQ ID NO: 1210:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1210:

TTGATTGCAA CTTTGATAGT GAAAACATTT ACATGATGTT GTCACTGGTG CACGGGCGTC 60

GAGAACAATC ATTGCGTTAT TGACGGTGCT GCCCTGCTGT CTCAGTTTGT TGATGCAAGC 120

ACTACACGAA ACCCAATAGC nTCACCAGG 149

(2) INFORMATION FOR SEQ ID NO: 1211:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1211:

AATGTTTCTC CTAATTTTAA ATGTTTAGGA ATATTAACTA GGATAATAAA TCCAGCGACA 60

TCCCAAATGG GATTCATATA AGAATGTTGG ATGATAATnT TGGCCGTTAA TATACATATT 120

TTCTATTATA AAATTGGGCA AA 142

(2) INFORMATION FOR SEQ ID NO: 1212:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1212:

TTTAAATTTA GTCACTTCAC CTTTTAAAGC ATGTTCATAA AATGTTTGCA TCATCAATGC 60

ACGTTCTGAA CCAGAGCCTT CAACACAAAG ATAAATTTGT ACAGCAATAC CGCCTCTAAC 120

TCTTCGTTGC GATGATGGCA ATACCACTCA ATCCAACGCT CnG 163

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 765 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1213:

GTCACCTTTC ACGTCTTGAA GAAAAAGGCT ATATAAGAAG AGATCCAACG AAACCACGTG 60  
 CTATAGAAAT TGTAAGTGAT CAAACAAATG ATAATATTAA TATGGAAGAA ACGATTCATG 120  
 TGCCAGTTAT TGGTAAAGTC ACAGCAGGTG TTCCTATTAC CGCAGTAGAA AATATTGAAG 180  
 AATATTTTCC ATTACCTGAA CACTTAACAT CGACACACAA TAGCGACATA TTCATATTAA 240  
 ACGTCGTAGG CGACAGTATG ATTGAGGCTG GTATATTAGA CGGAGACAAA GTAATTGTnC 300  
 GCAGTCAAAC CATAGCAGAA AATGGAGACA TTATTGTTGC TATGACTGAG GAAGATGAAG 360  
 CAACTGTCAA ACGCTTCTAT AAAGAAAAAA ATCGTTATCG ATTACAACCT GAAAATAGTA 420  
 CAATGGAGCC AATTTACCTA GACAATGTTG CTGTAATTGG GaAAGTAATT GGTtTGtACC 480  
 GCGAAATGTA ATATTTTAAA CCGTTATATA TTATCGTAAT TGTTAAGCCC TCATTTTtAT 540  
 AAATTTTGGG nCTCTTGAAA AAGTTACGTT TTCAAGAGGT TTTATTTATT CTAATCTAAA 600  
 TTCAGTTCAA ACAGAAATTG CGAATTGTtA GATAATCTCA TTCTTTA-TA TAAATnTTGA 660  
 ATTACAGATT TCTGCAAAAT GTTACACAAA TTAAAACTCG CCCCCGTAAT AATTTACAGG 720  
 AGCGAGCCAT TATTATTTTT TTChTTCTTT TTTATTAAGT ATATC 765

## (2) INFORMATION FOR SEQ ID NO: 1214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1214:

AGTTGCCATC AAAAATACAG AACCTAATnA TnACCTTTTTA TGATTTTTTTG TGAATTCAAA 60  
 GTCACTTTCT TTTTnAAGCT TTAAATTTCT CCCCATTTTT TTAGCCCCCT ATAAGGATTG 120  
 AATATCAATG CCTTCTTTCA TTAAATTTTCT TCTAATTTTC GAAACAAATA ATAATGCATG 180  
 TTCTCCATCA CCATGCACAC AAATGTATC TGCTTGTAAC GTTACTTCCT TATTGTTTTT 240  
 TGAAATAACT TTATyyyCct TCACCATCTT TAAACCTGC TTAAGTGCTT CGTCAGTATC 300



ATCAGCAAAC ACTTCAGAAG CTGTAATTAA TCCGACATTC TTTGCTTCTG AAATTAGATA 420  
 TGAATTTGCT AATCCTACTA ACACTAGTGA TGGATCAAAG TCATAAACAG CTTGTGCTAT 480  
 5 AACGTTTGcN ATTnC 495

## (2) INFORMATION FOR SEQ ID NO: 1215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1215:

AnTGTCCAGG TACCCGTGGT CCAAATTCTG ATGTACGTAG ACCATTGnCT CGTATTTGTC 60  
 AGATTGTGTT AATGATTGTC TCTGTATTAG GAAGTTTATT CTCCATTTTA ACAATTAGAA 120  
 AAATAGATCC GTTAAAGGCG ATTGGGTAGG AGGTGTGCAA ATGTTGAAAT TGAAATGTAC 180  
 AAGTCATTAA GTGGATCTAC ATGAGCGTAA GGTCATTGGA ATAGGTTTGC TGTGACTCGC 240  
 25 CGA 243

## (2) INFORMATION FOR SEQ ID NO: 1216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1216:

GGGCTTCTTT CTAAATAAC TAAGTGAATT ATCTATATAT GAAGAGGTCT CCAATACTTT 60  
 TTATATAATT CGTGATTACA TTCTATACTT TTAATTGTAT TTTCTGCGTA GGAAAGTGGT 120  
 TTTATTAATT CGATTAGTTC GAACTACAnT CAAGAAAAGG TAAAATTTGT GCATGAGCAA 180  
 GAGAAACATA CCTGAACCAA AGGCACCCGA ACAGTACCTA GGCCTAAGCG GCTAATTATA 240  
 45 AATGCTCAAG CGCAnG 256

## (2) INFORMATION FOR SEQ ID NO: 1217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1217:

5 TTTATTTTTT CTTCTAAACG AACATTGCT TCTTTTTGTG ATTGTTTGT ATTCTTGTTT 60  
 AACACAACAC TTACGCGCTT CCATTTATCT GTGTATGGAT CTTTATACTT CTCGTAGTAT 120  
 CTGTATTTAG TTTCGTTATT TTTGTTTTTA AATTTTTCAA TCCACATGTT TATACCTCCT 180  
 10 GAGAGAACGT ACGTTCTGTA AATTTGTAAG AAATAATAAG GGTAGGTGGG CTACCCAAAA 240  
 TTTAGTACTA GGTACTAAAT ATGTTATAAT AAAATAAAAA GTAGGTGATA AGATGACTCA 300  
 ATTTCTAGGG GCGCTTCTTC TTACAGGAGT TTTAGGTTAC ATACCATATA AATATCTAAC 360  
 15 AATGATAGGT TTAGTTAGTG AAAAAACAA GATTATCAAT 400

## (2) INFORMATION FOR SEQ ID NO: 1218:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1218:

CCAAGTGTC AATTTAGATG ATTTTTTTGT TGACCTATCG CCTTAACTGA AGAAACTGAT 60  
 30 AAATCATCCA TTTCAAAAAT AGGTCTAGAA AAATCTGTTC CGAAGGtCTT AAACGATTCA 120  
 TATCACGAAT ATTTTAAATC GTTATATCAT TTTCTGTAA TAATACATCT ACTTGCTTTA 180  
 CGGGATCTAA CGAAGTTGTT TTAGATAATT CTTTCATCCA TTTATTTAAA CCTTCAGCTA 240  
 35 ACGATTCTAT ATTTTCAATA TCCATCGTCA TACCTGCAGC CATATGATGG CCGCCAAATT 300  
 TAGCGATTAA CTCTTGATGT GCTGATAGTA TTTCAAACAT CGACACTTGA TCAATTGATC 360  
 TGGCGGAGCT TTTGCATGAT TTTGCTCCCT ATCAATATTT 400

## (2) INFORMATION FOR SEQ ID NO: 1219:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 458 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1219:

50 AAGATATTAG ACATAAAATC TAAAnACAGC AGTAAGATGA TTTATGATTA GAAACTATCT 60  
 TACTGCTGTT CACTTTTTAT AATACTTCTG AATGTCTTCA CTTATACTTC TAGTCACAGA 120  
 55

GCATTCATTT CTGTCTAGC AACGTTCTAC TCTAGCGGAA nTAAtTAGCT ACCATCCTCG 240  
 CTAAGAACCT TTCTTGACTT GTGACAATCG CTTGCTTCTT TCCTCTCCTT CGGcTCTCGC 300  
 5 TTAATCATTT AGCTCTACTA AACTCGTTGC GCTCTTTTCT CGTTTCGTCA GATTCAAACG 360  
 TTTTCACTTC GCCAAGCCAT TTTCTTTGT GTTTACTTTT TATTTTGACG TTTTAGACAT 420  
 10 AAAAAAAGAG ACCTCACGGT CTCAACTTGG CCTGGGCA 458

## (2) INFORMATION FOR SEQ ID NO: 1220:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 494 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1220:

CAAAATTTAT TTCTTGTAAG GTACAATATA AGTTAAATGT TGTGTTAGG ATTGATTCTT 60  
 25 TCATCTGAGC ATTTAATTGT AAGTCGCTAT ATTTAATTTG TTCAGTATTT AmAAATAAAT 120  
 TGAAAAATTC AACTGATAAT AAAGGTGTTT TAATCATACA AATACTTGAC GGTTCGTAAA 180  
 TAGTGTTTAT TTGTAAGCAC CTCACATATT TGAATAGACA AATAGAGCCC TTTCAGGCTC 240  
 30 TATTTGCTGT AATCTTAACA GCAGAAGCTA TTAATACTAC CAGTCTTAGC ACAACCAGGA 300  
 GTACATAAAC TATGACTTGT AATACGTTTC TCACCTGCTG AATCATTTGA GTnATTGTTT 360  
 GCTTTAACTT GCACGTCTAA ATCAAGAAGT TTTCCATAG ATAAAACCTC CTATTATTAG 420  
 35 TTGAAGTTAA GGCCTACTTC AATTGTCATA TTATCCCTTT TCACACAACA AATCAATAAA 480  
 TTATATAATT ATAT 494

## (2) INFORMATION FOR SEQ ID NO: 1221:

## (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1221:

50 ACTATTATTT TAATAGTGAC GACAGTTTAA ATTTTATTAA GTATTGCTTT AATTACCTTT 60  
 ATGCAATACT ATTTACACA AGAnACCGAA AATGCCATAA GAGAAGATGC TAGACGTATA 120  
 55 AGTTCACTGG TCGAACAATC ACATAATA 148

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1222:

TCGCTTTTAC ATCAAATAAA TTATCTTTAT ACAATTTTCGT ATGAATTACT TCTTTATAAT 60  
 TATAAAAATG AGGAATTTTT TGATTGTTTA ATTCACTTGC TAATTGATTA GCTTTTTGTT 120  
 GGTCTTTAAT TGTAACGTCG TGTGGTGCAG TATATTTTAT TTCACTTGAT AAGGACGCTC 180  
 TACTTATAGC AGCAAAGCAA AGAACTGAAA CAGTAATCGC TGAAATGATT GCCATGACCG 240  
 TAAGTGAAAA AGCATTTTTC TTAATACGAT ACATAATAGA TGATGAGAAC ATGACATCAT 300  
 TtACACTTAT AACACCTTkt CTAAACTtCT TCACCATTTT AAAAActAGA GARACAGAGC 360  
 TTTTAAAAAA TAAGnGTGCC CCAATCACAG TTGACAAAnAA A 401

## (2) INFORMATION FOR SEQ ID NO: 1223:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1223:

CTTGACCAAA TCCATTTTTT AACAAAAGTG GTCAAGTGAA ATCCCATCTT TCCAAATCAA 60  
 AAAAGAGCTA AAGCAAAATG CTCTAGCCCT TGaTATTACT GATTTCCTAT CATTGTnTAG 120  
 CGTATTAATA TTGCTTCATG TACTGATCTC TTTCCCATTC AGAGACTTGA GTTCTG 176

## (2) INFORMATION FOR SEQ ID NO: 1224:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1224:

AATACTTTTA CGATAATTAT AAAGGTTTCAT TCAAATCTTA GGGCAAAATG TATAATATTT 60  
 TTATGCAAAT TTAAACAnT AACACTTATT TCAAGGTTCA ATATTTTGAG AATAAGGAGT 120

AATGCCAATC AAACCTCGCTC GAAATAGGGG GAAACGAGGC nATCATT TTTT GACAATGAGT 240  
 GTCAATAGGG AAGAATAACA ATTAGGAATG ACTCATAGGA GGA 283

(2) INFORMATION FOR SEQ ID NO: 1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1225:

AAAAGAAGAG AAGAAAGTTG AAGAACCTCA AGCACCTAAA GTTGATAACC AACAAGAGGT 60  
 TAAAACTACG GCTGGTAAAG CTGAAGAAAC AACACAACCA GTTGCACAAC CATTAGTAAA 120  
 ATTCCACAGG CCATTACAGG AATTTAAGTC GGATACCACG TGAATnACGT CAGGATGTCn 180  
 GCCGTTTACA TGACACGCTC TACATATTCA CCACTCG 217

(2) INFORMATION FOR SEQ ID NO: 1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1226:

TGGGTACTAT TTATTACGTA AAAC TTTTCG TTAGCGATGC CGGCATTGCA AGAGCAAGGT 60  
 TTACAAAAGC GGACTAGGTT TGCAC TTTCT GCTGTTCCAT CGCATATGGA TTAGTAAGGT 120  
 CTTTATGGGn ACTGTAAGTG ATCCGAGCAA TGTCGGATAA TCTAGGTCTT GGATAG 176

(2) INFORMATION FOR SEQ ID NO: 1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1227:

AATGAAAATA AAGAAGATGA TTTTGTGCA TATGGGTCTC CAGAACATAA TTATCAATTT 60  
 GGTGGAAGTT TAATCAAAAG TAAAAATTTA AGCACGTTAT TAAAACCAGT ACATCAAACC 120

GCGGCCGTTT TAATTTTGTG TTCAAGTTAA TCATACTTAC ATATAAAAAT GAAAAGTTGA 240  
ATTTTATAGTA CAATTTCAC TGTATTTATC TGTTAACCAC TTTATACCCG CAATATTTTCG 300  
5 TTGATCTTAT ATAAACACTT TTGGCTGCTT TTCCTTGACC TAGATTAAAA TTATAGATTT 360  
TCCTTGTAAG AGTGTGTTTG TAGTATCATA AATATGTAAA 400

(2) INFORMATION FOR SEQ ID NO: 1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1228:

20 ATCTAGCATG CTTTGGAAA ACGATAAGAA TTTGGTGTGTT GAATTTTCATA ACCAACACCA 60  
GCAGTTTCAA CAACTACGTG TGTAAGATAT AAATGTGTGA CTTGACCTTT GACATACGCG 120  
25 TACATTATAG GCACATCCTT ACATACTCA 150

(2) INFORMATION FOR SEQ ID NO: 1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs  
30 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1229:

TCGGTACAGT GCATTTGGTG CGTCATGGTT TACAAGGnAA AAATAAGTGA TCACTATTTA 60  
TCAGTATGGG AAAAAGCAAC GACGTATCAA ATGTACCATG GCTTAGCATT ATTAATTATA 120  
40 GGTGTAATTA GTGGTACA 138

(2) INFORMATION FOR SEQ ID NO: 1230:

45 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1230:

55 TTGGTATGTA CCTCCAATAG TAATTTCAAT AACTTTGTCT GTTGAACACT AAGAGCAATT 60

CCTTGATTAT nCTAAGAAAA GTAAAAGCAC ACGGAGTATC CTATCAGAAA ACCAGTATAC 180  
CA 182

(2) INFORMATION FOR SEQ ID NO: 1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1231:

TCTCTTTAAA TTGTACACAA TTCTGGATAA CTATCCCCAT TTCTGTGGAT AAACACCTTG 60  
ATGTCTTATT ACTTATCCTC GTTTTTATAT CCCATATTTA TCAACGGkTA TCGCTTTTTT 120  
TCATAAAAAA aCACTACCGT ACCyCTTATT TAAGAAATAC AGTAGTATTA TTTTCAATAT 180  
ATTTTAGCTA GCnTTTCTAC GTCGTACAGT CGCGATTAAA CCTATACCTG CTA 233

(2) INFORMATION FOR SEQ ID NO: 1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1232:

GTTTTTGGTA AAAGTACTAA TATTAaCCAA GTATTGAGTC ATATGTTAAA ACAAGATGCG 60  
AATGATATTG GCTTTGCTAA ATTACTACAA AATGAGAATA ATCGTATGAG TTATAACGAG 120  
TTAATGAGTG AATGGCAATC ACATCAACGT GCATTTTTAG AAGAGTTGAG GCATGTTGAA 180  
ATGTTAAAAG AAGAATCTAT TAGAGCATAT GATGTTTATA AAAATTGTGA GTCTTTCTCT 240  
AAGATTGAAC AGGTTATTAA TAGTGAAAAA ACAAGTATTG AAGAACAGGT ATATCATTTA 300  
GATAATGAAA CGTTACGAGA CAATAAAGAA ATAGAAGTTT GGGATAATCG ATTTAATTAn 360  
ATTGnTAGCC CAATGGnCCC TTAA 385

(2) INFORMATION FOR SEQ ID NO: 1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1233:

CTGAAAAGAT TCAACTAATC TGAGTCAGGT TACAATCTCA TGATAACCGC TCGCACCTCG 60  
 5 GAGAAAGACG CTCAAACAGT ACAGAGCTCG ACCGCAGGAT ATTTTTTGTG AAAATGAACG 120  
 TATGAGCTGT TCAGAnGGCA CTTTATTGCG CAATAAAACG GTAAAAATCC TGAAGTGAAG 180

## (2) INFORMATION FOR SEQ ID NO: 1234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1234:

ACCATTTTAA TTTnChTTAT GACCTTGAT GGCATTATCA aCAGTTATGA TTAATGTTAT 60  
 GCYTTCATCA TGAGCATTTC TAAATGCTAG TTCGTTTGGT CCATATCTTC GGTAAAGCGG 120  
 TTAGGAATAT GCCATCCTAC TTGTGCACCT AAAAGTTGTA ATGTTATCAC TAAAATTGTA 180  
 25 GTTGCGGTAA CACCGTCGGC ATCGTAATCA CCATAAACTA GGATTTTCTC ATCATTGCT 240  
 ATCGCTCTTT TAATTCTTTC AATAGTCTTA GTCATATCGC TCAATTGnAG TGCATCATGA 300  
 TTGATATCTG TATCTGAAAT GATGGATTCT ATTGCTTGTh CATCAATAAT CGATTTACTT 360  
 30 nCTAATATTT TTTTACGAT TGGCGTTAAC TTTAATTTG ATGTTAATTC ATCACTTATG 420  
 TATTCAGCTG GTTTAGTTAA TTTCCACTTA TAC 453

## (2) INFORMATION FOR SEQ ID NO: 1235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1235:

CGTGATTAAG TTGGATACTA AAATTTGGGA TGTTAGAGAA TGTGATGAAG ATTTnCAGCA 60  
 ATGTCCTGAA ATTAATGAAA TAAGAGACAT TGTTTTAAAG CGGTGGTTTG ATAGGTTTAC 120  
 50 CAACTGAAGC AGTTTATGGA CTTGCAGCGA ATGCGGCAGA TGA 163

## (2) INFORMATION FOR SEQ ID NO: 1236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1236:

GTTAACACAT CGCTTATAAC GTGTAAATAT AAACACTGTT TTATAAAAAC TTTTATACC 60  
10 ATTACCGGCA CCGATAAATG TGTACTATGG AGCACAACAA TAACTGGAAT ACTTnGATTT 120  
AATCCCGCTA TAACATTTCC TAAT 144

(2) INFORMATION FOR SEQ ID NO: 1237:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 204 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1237:

25 ATAGTTTAAG GTGATATTCA AACAATATTA GGTtTGATTT AACTATCAAG CATCTACTTT 60  
GTCATGTTTA ATACCAGCAA ATAATAAAAT CCATGTCACG ATAATAAATG GCATGTTAAT 120  
GCAGGGTAAG CCCAACCGGT CCAGCCATGG TGGTGGTACC CTAnTTGGCC nCCACCTACC 180  
30 GGTTAATTAA CCACCCCCAA AAAA 204

(2) INFORMATION FOR SEQ ID NO: 1238:

35

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 157 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1238:

CGGTCATTTT GGTTATThAA CAACTATACC TGAGGGGTGG TGGGTAATTC GTATTGCCGA 60  
45 TTCAGTTTTG TTAATATGCT GACCACCTGC ACCAGAAGCT CTGAATGTAT CAACTGTGAA 120  
TAGCATCCGG ATTGGTTTCA ATCTGCTATG GCATCAT 157

(2) INFORMATION FOR SEQ ID NO: 1239:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 164 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
55 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1239:

TTAAAGCATG TTCATAAATG TTTGCATCAT CATGCACGTT CTGGACCGAG CCTTCAnCAC 60  
 5 AAGGTAATTT GTACAGCATA CCGGCTCTAA CTCTTCGTTG CGTATGCCTG CAATTTCTTA 120  
 CCTCGATACT TAAGTCAATT TTCCGGGCAT AAGGGTGTTC ATTT 164

## (2) INFORMATION FOR SEQ ID NO: 1240:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1240:

TTGAAAACT GAAAACGGTG AAGTTTACA AACAACTAAA ACAGATAAAG ATGGTAAATA 60  
 20 TCAATTTACT GGATTAGAAA ATGGAACCTA TAAAGTTGAA TTGAAACACC ATCAGTTACA 120  
 CACCACACAA GTAGTTCAGA ACTATAAGTT GATCAATGTC TCACACAGTG CATAATnGAA 180  
 25 CAACATGCCG GTCTCAACAC TCACTAGGCA GAGGATCATA ACGGTCGTnG TAAGCTCGG 239

## (2) INFORMATION FOR SEQ ID NO: 1241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1241:

TGATAAATAA TAGCGCCATC ATAAGTTGCA GGGTGGTAAT CATAATTTCT ACCATGAGTC 60  
 40 TTTGCCTTGA AAGACCGTGC ACCACTTTCT TTAAATCGG TAAACGATAA TGnCAAGTTT 120  
 AAAATAATTT GGC GTGTGG CATTTGAGTA TC 152

## (2) INFORMATION FOR SEQ ID NO: 1242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1242:

ATCTTTACCT TTCACTGTTC ACTTATGTAC CATAATACTT CTGACAGTTA CTAATTAACA 120  
GCAACTCTAA CTCATTTATA TTAACTA 148

(2) INFORMATION FOR SEQ ID NO: 1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1243:

GGTACCAATC GATCGTTACA AACGTTTCGT TAAAGACGAT AAAAAAGTAC CAACAGGCAA 60  
TGAATATCGT GAATTAGTAT TAAAGCAAT TCACATGATT ATGCTTGGTT TCTTGATAAA 120  
ATATATTGTT GCTTACTTTA TTAACACATA TGCAATCATG CCGTTACAAT TAGACTTACA 180  
TGGCTTTGTC AATTTGTGGT TATATATGTA CGCATACAGC TTATATTTAT TCTTTGACTT 240  
TGCAGGTTAT AGTTTATTTG CGATAGCATT TAGTTATTTA TTCGGTATTA AAACACCACC 300  
AAACTTCGAT AAACCTTTCA AAGCGAAAAA TATTAAAGAT TTCTGGAATA GATGGCATAT 360  
GACATTATCA TTCTGGTTCA GAGATTGTAT TTACATGAGA TCTTTATTCT ACATGTCTCG 420  
TAAAAAATTA TTGAAGAGTC AATTTGCAAT GTCCAACGTG GCATTCTTAA TCAACTTCTT 480  
CATAATGGGG ATTTGGGCAT GGAACGAAG TGTAATACCA TTGGTTTAAAG GGGTTAAACC 540  
ATGGCCAGCC TTGGTTAAAG GGTAnGGnCC AATAAGGACG GTGGGCGG 588

(2) INFORMATION FOR SEQ ID NO: 1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1244:

ATTGCTGGAG AAAGGCAAGG CTTTGCAGGC GGATTGAACT CGACATTCAC TAGTATGGGT 60  
AATTCATAG GTCCTTTAAT CGCAGGTGCG TTATTTGATG TACACATTGA AGCACCAATT 120  
TATATGGCTA TAGGTGTTTC ATTAGCAGGT GTTGTTATTG TTTTAATTGA AAAGCAACAT 180  
AGAGCAAAAT TGAAAGAACA AAATATGTAG CATAAGTATT TTGGTGTATA TTGATATAAA 240  
GTAAAGCGTA ATATTATGAA TGATTAGCAT CGTTTTCTT ATGAATTTTA TTAAGAAAAT 300

GTTATATGTh ACAAAA

376

## (2) INFORMATION FOR SEQ ID NO: 1245:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1245:

CAATTTGTTC TAAAGCAAAT TCTTTACATT TCTCACGGAA TTCAGCTGTT GACATTTTCT 60  
 TTCGGTCAAC ACCTTTTTTTC GTTAATGGCT TGTTC AATTG GGTA AACCAT GTGGTTATCC 120  
 CCCAACCTGG GTACCGTATG GGGTGGCCAT TAGGAAACCC CTTGGCAATA GGTTTTTTTAA 180  
 TAAACCGGTA nCAAATTAAA AGGTCCTTTT TTAAAAAATT TTTGGTTTCC AAAGGGGCCA 240  
 ATGGnTCCCC CAATTAATGG TTAAAGGTTT TAACCCCAAT TTTCCGGC 288

## (2) INFORMATION FOR SEQ ID NO: 1246:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 161 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1246:

CATCATCAAT AGAACGGTAT TCGCAACGTC GTAGAAATCC CTAAACGAC GAGAACAAAG 60  
 CAAGTCGACA TCAGTAAAC ATTAAAGATA TTATGGCTGA AGCAGAGAAC TTAATAACTT 120  
 TTTATAAATC TATACnTCC AAAATGTAAA ACTACCAAAA T 161

## (2) INFORMATION FOR SEQ ID NO: 1247:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1247:

TCACTACGTT GTTTAATTGT GGTAATTGCA GTTTTACAGG CTTGTCTAGT GAAGATTTAA 60  
 AACTTAATTC AAGTGTTTTA GTCATGAATA TGTCTCTCTG ATTAAATTGA TAAAGATTTG 120

TTAATTTGGT CGTTTGATGC ATCAGGGTTA ATGTTAGCGA ATCGACGCTT AAATTCTGTT 240  
 TGTTTGCCGT TAGCGTctAC TTTAGTAAAT GaTAATACAA TAGTGATGTG GTTTATTTtA 300  
 CTCATATTTT AAAACCTCCT TTCACACTAT ATATCGAAAC AAAATAATAA AATGGCTAAT 360  
 TTTATTTTCT ATGTTTAAAA TCTATAAAAn AGGCAATAGA TATGTGTAAC TAAAATATAn 420  
 G 421

## (2) INFORMATION FOR SEQ ID NO: 1248:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1248:

ATAAGCTGCT GTTGATAATC CAAGTGCTAA AGTTAAATAT AATATAGTGC CAAAAATTTT 60  
 ATTCTTCTAT AAAAACACCT CTTCATATTT AATCCATATC TCTTTTTCGT TATTTATACA 120  
 GAATTTTCTG AAAATAGTCA AGGTTAATTT ATTTGCTGCA AATTTCAACC ACTTTATGTT 180  
 AAATGGACAT CAAAGTATAA TTGTATTATT ATTAAATTGT GCAGTGTATA AATAGACGAT 240  
 ATGCAGGAAC ATGTCGCCTA TTGAGCCCGT TAAAAAGACG GTGACTAAAT GAGATTTTCT 300  
 TTAACCATCA TTCGTTGTCA AAGTTTGGAA ATgATGGTTG TTTTTTATTG TTTAAATTAA 360  
 TCATTGCGAC TTCTATATCA ATGAAAGTTA TCTTAATATA TGAAC TTCA 409

## (2) INFORMATION FOR SEQ ID NO: 1249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1249:

CTTTCAATTA CGAACAAATC ATTACTAGTT TATTTAATGA TAATGACTGn AATTTAGCAA 60  
 AAAACGTAAC ATGATCATTT AGCTTGAATT GGTAAAACTG TTTATCCAAC ATTTCCAGAC 120  
 CAAATCACAC CGGTAAAACG TCAAAATATA TTGTnTCTAT GCCCGTTTTT ACCAGTTATC 180  
 TCATTGCAGG TATATTGATG AATTCACAAG TTGGTAT 217

## (2) INFORMATION FOR SEQ ID NO: 1250:

- (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1250:

10 CAGAACGTGC GGATCGTTTT TATGCAACCT AAACCAGGTA CGGATTTAGC GTGGTTAAGT 60  
 GGCAGTGCAC TAAGTATATT CATTGATCCT GCATTTACAC GATGAAAGCA TTTATTGCAT 120  
 GAGTGGGTAG ATGCATTTTG CTGGAATGAT TCACAAATGC ATTAGAGnAC ATTTAC 176

15 (2) INFORMATION FOR SEQ ID NO: 1251:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1251:

25 TTTCAACTTT CTAAATTATA ATATATCTTT TAAAAATAAG CTAGAATTTTC TATATAATAA 60  
 ATGTTAATAA CGAAAAGGGA TGATGCATAG TGATCGCAAG CACGCCAGAG GCCGATTTGA 120  
 30 TATTGCGAGT TAGTTTATAT GGTTCGGAT GATATGGATA GAATTGGTAA ACATCTCCTA 180  
 AAGCATGGTA TAGTGCAATT nAAAAanCTGT GT 212

(2) INFORMATION FOR SEQ ID NO: 1252:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1252:

45 CAGTAAGTCA ATTGAAATGG CTAATTTATT AAATCTATAA AAGCATAGAG CACTGTTGTG 60  
 AGTTCATAAT CAAAGATTTA TAAATGTnTC AGACTGCCAA TATAACATTT AGGACCTAGA 120  
 ACATTGATTA T 131

50 (2) INFORMATION FOR SEQ ID NO: 1253:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1253:

5 TTAGTAGTCA TCGGTATTGG TGGTTCTTAC TTAGGTGCAC GTGCAGCAAT CGAmATGTTA 60  
 ACGTCATCAT TTAGAAACAG cAATGAATAC CCTGAmATTG TATTTGTTGG TAATCACTTA 120  
 TCATCAACAT ATACGAAAGA GTTAGTTGAT TATTTAGCAG ACAAAGATTT CTCTGTAAAC 180  
 10 GTTATTTCTA AATCTGGTAC AACTACAGAA CCAGCAGTTG CATTTAGATT GTTCAAACAA 240  
 TTAGTTGAAG AAAGATACGG TAAAGAAGAA GCACAAAAAC GTATATTTGC AACAAACGGAT 300  
 AAAGAAAAAG GnGCTTTTAAA ACAGTTGGCT ACAAACGAAG GTTATGAAAC GTTTATCGTA 360  
 15 CCTGATGATG TAGGTGGAAG ATATTCTGTT TTAACAGCAG TAGGATTATT ACCAATTGCA 420  
 ACAGCTGGAA TTAACATCGA AGCTATGATG ATTGGTGCTG CA 462

## (2) INFORMATION FOR SEQ ID NO: 1254:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1254:

30 ACTCATAAGT GAATGGTTGA TTACCACTAG TTAAAACTTC ATATACTATA GTTTCTTTTTT 60  
 TTATTTTGCA ATTAGTTATT TTCATTATAA ACTTCCTTTC AAACACTGCT GAAATAGACG 120  
 TCTTTTTCAA ATAAGCATGA TTAATACTTC AATTCTTTAA TCCACATATA TTTAAAAGTG 180  
 35 AGGTAGTAGG TAATAAATAT AAGACTTAAA GTTAAGATTG CTTTTTTCAT GTTTCATAAT 240  
 TAAAACCTCT GTAAATTTAA GGTTAGTATT ATGAAATAAT GGATTGGTTT ATTCTTTAGT 300  
 ACTAACTTCG TAGTAAATTA TATAGTTCGC TAAATTGTAT TTATCTACTA TATTTTGGGA 360  
 40 ATAAACAATT TCCTTTTCTT TCTTCAGTAA ATTATAAAAA 400

## (2) INFORMATION FOR SEQ ID NO: 1255:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1255:

NAATCTATGT ATGGGGGCAT CCAAAGATTT CATAGACTAC TTATTTGTTG ATGAAGCCGG 120  
 ACAAGCAATC CTCAAGC 137

(2) INFORMATION FOR SEQ ID NO: 1256:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1256:

TGAAATGTAG AAATTGAATT AGAAATGAAG ATTAAAAATC nACACGTATC GTTCAAGTGG 60  
 TGCAGGTGGT CAGCCGTAAA CACAACGTAC TCTGCGTACG TATTACCATT TCCACTGGTG 120  
 TCATTGCAAC ATCTTCTGA 139

(2) INFORMATION FOR SEQ ID NO: 1257:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 177 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1257:

TTACCAATTA TTTTAACACC ATGTTTAGAC CAATTTGATC TGAATAAATT AATCGCTGTT 60  
 TGTACCTCCA AATTGTTACA ACGTACACCT TTAGTTTTTC TAAATTAATG TATATTCATC 120  
 ACATCTTCTT CAGTTAAGGG TCAAAGTATA ATTTGTGCGAA ATTGTGAAGT CGTTGTA 177

(2) INFORMATION FOR SEQ ID NO: 1258:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1258:

AAGACCAACC GAAATGAATA TCGACATGGA TTAAGCCTAT ATTCAGATGT AAACGGCGAT 60  
 TATATTAAAA AGCCAATTAC AGAATGTAGT GGTTAATGAA ATATGCCCAA GAATGGGCTG 120  
 TATCACTTAG GTGTATCAAA CTGACCAAAA ATTGGAAGGA CTTTAGGCCA AAAACCATGC 180



TTAATTTTTC

250

(2) INFORMATION FOR SEQ ID NO: 1259:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 170 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1259:

ACATTTCACGG GACATTTTCAT TACATCACCC TGCTTTATTT TGGATTATGG CCTAATTTAT 60  
 ACTGATAAAT CTAGGAGGTG GAAAAAAGAA TGCCCTGCAA TTTAATTnCA TTTAACCAAA 120  
 TAATGAAACA ATAAAAACA TTATATCGTT ACTTATTAAG TAATTTGGCA 170

(2) INFORMATION FOR SEQ ID NO: 1260:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1260:

TTTGTACTCC GATACGTTGT ATTCAGGTG ATGACACTAG GAATTTGTAA TGATCAATTT 60  
 CTCTAATTCT TTACAATTGA TAGAATTCTT CGATTTGTGG ATAGACATTC ATATCATTGT 120  
 CTAATGATTT TTGGTGATTC ATAAATTGTG ACTAAAGCTT GGATGCTTTA GGATTGTAGC 180  
 TGAGACACAT GTTGCGTGAC TnGGATTTA TCAnATAATC TCAATCACGT GATCCnATCA 240  
 CATTCAATCAG CTCATAAAT CAAGATGATC GTCGTTTATG GGCGATTAAT GGCGTACCGC 300  
 CAGTGTCGGC ACG 313

(2) INFORMATION FOR SEQ ID NO: 1261:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 206 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1261:

TAGCGATCAT TTAATCAAGG TTAGATTATT TAATGTCAGC ATTACGTTTG ACAATGAACT 60

GTTTGAGGTT ATCACAATGC CATTTAACAC TATGCGCACA TGGCTGAACT AATnAGCGAC 180

GAGATGACTT CAAACCTTGA TTAGGT 206

(2) INFORMATION FOR SEQ ID NO: 1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1262:

AAGTGTGTAC ACGATAGCTA AACTCAAATA TCACAGAACA ACAAATGTCT TAGTACTTTG 60

TGCCGGTGGT GGTACAAGTG GATTATTAGC CAATGCACTA ATAAAGCAGC TGAAGAATAT 120

CATnTGCCAG TGAAAGCGGC ACTG 144

(2) INFORMATION FOR SEQ ID NO: 1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1263:

ATAACGACAC CTAATGCAAT TTGAATAAAG CAGTAGAATT TGTGGGAATC GATTATTGAT 60

AACCGAACTA ATAATCACAG CAAAATAAAA ATTAAAAATG CTCTAATAGT GCCTACATnC 120

TCCTCAAATT TT 132

(2) INFORMATION FOR SEQ ID NO: 1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1264:

TATGTCAATT TCGTAGAATn GGTnTTAnGC GCTATTTAGA ATAGCCATCA GATnAAATCA 60

TTATTTAAAC GTATAATAGG TCAAAATATA GAGAGTTACT ATACAAATTT CTAACnTTCA 120

CTTAAATATA AATATATATA ATTAAAGTGG AGGAGAAGG 159

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1265:

ATAGCTCAAG CAATCATTAT GTTTATAATG ATTGTATGGT TCTTTATAGA TGCTTTATTG 60  
 ATTAATTAAT AAAAAGCTTA TTGCAAAATA TGTTTTTCGG TAACTGTAAT TTAGTGATT 120  
 TATCATTAAC AG 132

## (2) INFORMATION FOR SEQ ID NO: 1266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1266:

CATGGATTTA TCTTAGCGAT TGGTCTAATT TTACCTTTAG GTGCACAAAA TGTATTTATT 60  
 TTTAACCAAG GAGCTAATCA ACCAAAATAT AGATATGTAT TGCCTGCAAT AATTACAGCC 120  
 GGGTTGTCAG ACAGCTTACT TATTATTATT GCAGTGGTAG GAGTWTCTAT CATTATTATG 180  
 TCTTTACCTG TACTTCAwGC AwTTATTTAT ATAGTTGGTT TAATTTTCTT GATGTATATG 240  
 GCTTGGACCA TTTGGCATGA TAAACCCTCA ACAGATGGAG AAAC TCAAAT TATGTCTCCA 300  
 ATGAAACAAG TAAGTTTTGC TTTATCAGTT tCATTACTCA ATCCACATGC TATTTtAGAT 360  
 ACAATTGGAr TAATTGGtAG TAGTGCTGCA TTATATAGTG GCnGC 405

## (2) INFORMATION FOR SEQ ID NO: 1267:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1267:

TCTTTATATT GCAGTACAAA ATTGCGGTGG AGGTTTAAACA CAAGTAGACC GCACAAGATT 60  
 TAGCGTCTGA AGGTATTACT GTGTAATGCA TTCGCACCTG GnTATCGTTC AAACACCAAT 120

## (2) INFORMATION FOR SEQ ID NO: 1268:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1268:

TTTGCCCAAG TGACGTAAAG TACCCAATGT CCATTTGTAC TTGTATCGCC ATCAACAGTA 60  
ATCATATTAA ATGTATGGTC AGTCGAAGAT TTTAATAATT GATGAAGTGT ATTCGATTCA 120  
ATCGATGCAT CGTGTTATAA AAGCAAGCAT GTAGCCAATT GGAATCAAC CCGAnCTTGG 180  
CACACATGTA CGTTACACAT TAGAAnCAA GTGACCGACG GTAATCCTAC CCGCTCAACA 240  
CAAGCGC 247

## (2) INFORMATION FOR SEQ ID NO: 1269:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1269:

TCATTGTATA TGAGCAGATT GGCTAGGCGG TGGCTGGACT GACGGAATCG ACACCCGGCT 60  
GGGGTTGGGA AAAGTACAAG ACGCAACATG CTATGATTTT CCTATGTGGT TATCGTCCGA 120  
TTTAAAGTGA GCAGCGCAGG GTCAGTCATC TCTCACAGnA CCTAAAAAGA ACAGTAAGCn 180  
CAACCTAAAG CAGTGGAAct TAAATCATC AAGGT 215

## (2) INFORMATION FOR SEQ ID NO: 1270:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1270:

ACAATAAAGA CTATTAAAG AGATATAGGT TAGATATTAC ACTTTTAGAG CAAGACGGTA 60  
TAAATGCAAG TAAATTCGTG TATTTATCAA TACAGCAGGT nGAGTGAAAG GCCCAGCAG 119

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1271:

CGTGGCACGT TAAGCGTTTA ACCATAGCAT TAAGATGATT GTCTAGCAGA GGCGATTTGC 60  
 GGGCTCACTA CAGTGCATGA TGAACCTAAT GCTTCAAATG TAACATTAAA AATAAAAGCA 120  
 ACGATGTCAC TTCTTACTTC TACATCTGCC ATnTTCGTGA TTTCGTATCT ATCCCGCATC 180  
 TCATCTTGAA CGTACGAGCC TAATCGCCn GCGCGATCCT GCC 223

## (2) INFORMATION FOR SEQ ID NO: 1272:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1272:

TAGTTACAAT ATCTGTCAAT TTCTGGAGAA CCACTAAAGC TATGCATAAT CCCGCCTACC 60  
 TCTTCAGCAT GTCCTCCAA TAAGATATCG GTACAGTCTT GAGnTGCTTC ACGGTTATGA 120

## (2) INFORMATION FOR SEQ ID NO: 1273:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1273:

TTGCGCGGCA GTAAAATTCA AACTATTGGC GTCATTTTGC CTAGCTTAAC AAATCCGnTT 60  
 TTCTCAGCAC TGATGCAAAG TATTCATGAC CATAAACCAT CTGATGTTGA TTTATGCTGG 120  
 TTAACA 126

## (2) INFORMATION FOR SEQ ID NO: 1274:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1274:

GATTCTGAAG GATCAATACn ACATGTACAA TTTTGGCGTA GGTGCAAAGG CATCAGGTTT 60  
 5 GCTTGCTAAT CTACATCGAA GCGGCTACCT AAATTAA/TGA GAAATCACAC TCAGTTAATG 120  
 CATGTACTAG C 131

## (2) INFORMATION FOR SEQ ID NO: 1275:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1275:

TGGAGTATTA CCTCAAGTGA ATACAACATA CCTGTTGGAA GATTTTTTCAA AACTTTAATT 60  
 GGACCAAGTG ATGCCATTGA TGAGTTAAAT CCTAATAGAT TCAGGTTACC TCGGATGATT 120  
 GATACTAATT TGGCCTGGCG CACGCTTTAG TAnTAGTGG 159

## (2) INFORMATION FOR SEQ ID NO: 1276:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1276:

GAAGTAAATA ATATATAGAA TATAACAGGA AATAAAATAG ATAATATTAA TGTGTGTTTT 60  
 TTACGCATTA TAACTTTAAA TTCGATTTTC AAGTAACTTA GTATCATAAT TAGATCCCCT 120  
 40 TTGCTTTTTTA TTGnTGAAGT ATGAATCAAC AATTGAGACT tTTTGTATTT CAATATCATC 180  
 CAAATTAATA TGAAGTTGTT GAAGATATAA AATCGTATCA TTTACATTTG AAGTAATAAT 240  
 TTTsATAGTG CCATTATGAT TTTyycTGAA TAACTAAATC ATCTTTATCT AGTTTTAACT 300  
 45 TTCTTATATA TTCATCGGAT AACGTAATCT GAGATTGCTG ATTGGTTCTA ATATGTGACG 360  
 TTGAATCATT AAGTATTATT TCTCCATTTT CAATGAGAAT AATTTTGTCT GACATACGTT 420  
 CGACTTCTTC AATATAGTGC GATGTATAGA GTATCGTTTC ATTATCTTCT TTTAAATTTT 480  
 50 CAATAATTGA CCAAAAATAT TCTCTAATTT CTATATCCAT AGTCGATGTT GGTTTCATCTA 540

## (2) INFORMATION FOR SEQ ID NO: 1277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1277:

CTAAAnTAAG GTAATAGTTA CCAAGTACCA TATCTTGTGG ATGGTGTACT ACAGGTTTAC 60  
CATCTTTAGG TTCAAGATGT TTTGATGACT GCTAACATCA ACATTCTTGC TTCAGCTTGT 120  
GCCTCTTTTG A 131

## (2) INFORMATION FOR SEQ ID NO: 1278:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1278:

GTTTGCgATA TTTTAGGCAG ACAACCTAAC TTTACAGAAA CAGGTATCTT TTCTGTTATG 60  
TGGAGTGAAC ATTGCTCTTA TAAACATTCT AAACCGTTTT TAAAGAATTT CCTACGCAGG 120  
TGCCATGGTT TGGGCTGGAG TCAGGTGCGT TGTGTATAGC TGATnA 166

## (2) INFORMATION FOR SEQ ID NO: 1279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1279:

CATAATTATG AAAATGATAT GATTTTTATT AGACCATTTA AAAAAGCATA ATTTAAATCG 60  
AAGGCAGGAC ATTGAAATAT GAAATTTTCA ACTTTAAGTG AAGAAGAATT TACCAACTAC 120  
ACCAAAAAGC ACTTCAAACA TTATACGCAG TCTATAGAAT TATATAATTA TAGAAATAAA 180  
ATAAATCATG AAGCACATAT TGTGGGAGTG AAGAATGATA AAAATGAAGT TATAGCTGCA 240  
TGTTTATTAA CAGAGGCACG AATTTTTTAA TTCTACAAAT ATTTCTACTC TCATAGAGGT 300

ATTCATTTAT AAAAATAGAG GAGTATTTAT TCTTGTTGAT CCATATnTAA TAGAGAAT

418

(2) INFORMATION FOR SEQ ID NO: 1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1280:

GACATATCAT AAATTACATG GTGATAAAAT TnTCGGCTAC GATACTAACG GATTCCCGAT	60
TACCTGGTTT TATCCATTAG GTGAAAAGAA AGTTGAACGT AAGGCACCAA AATTAGAAAA	120
ATAATTAAAT AAAACAGCTT AATGATGTAA TGAAATTAGT GAGTTAATCA CTGACTTCTA	180
CGTCATTGAG CTGTTTTTTT GTGCTTTGTT ACAAAGCATT ATTGAATTTA TTTTACGTGT	240
TCATATTTTG AAACATCAAA GCCGTCTTGT TTAGCTTTGT TGATAATGTC TTTGATTGAA	300
TGTAGTCCTT TATCGGCGAA GTATGATCTT AAGTTGTCTT TTGTAGCTTG GTCAGCATTC	360
TTATCTAATA ACACATCAAT ATAECTTAAT TCATGTTCTA AGAAGTTTGC ATCATCATGT	420
AGTACGAGTC CATTTTGAGA ATAACTTT	449

(2) INFORMATION FOR SEQ ID NO: 1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1281:

TATTTATATG TACTGATGAT GAAGTTTATT ATCTATCAAG TGGATCAAAT CCGAAATATA	60
ATCAGTATAT GGGTGCATAT CATCTACAAT GGCATATGAT AAAATATGCA AAATCACATA	120
ATATTAATAG GTATAATTTT TATGGAATAA CAGGCGTCTT TAGTAATGAG GCGGATGATT	180
TTGGTGTTCA ACAATTTAAA AAGGGTTTTA ATGCACATGT TGAAGAATTA ATTGGTGATT	240
TCATCCAACC AGTAAAACCC ATTCCAATAT TAATnTGCCA AACCTnAAT	289

(2) INFORMATION FOR SEQ ID NO: 1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1282:

5 ATTGAGGTCG AGGTGGCCCCG GCTCCATGCA CCGCGACGCA ACGGGGGAGG CAGACAAGGT 60  
 ATAGGGCGGC GCCTACAATC CATGCCAACC CGTTCCATGT GCTCGCCGAG GCGGCATAAA 120  
 TCGCCGTGAC GATCAGCGGT CCAATGATCG AAGTTAGGCT GGTAAGAGCC GCGAGCGATC 180  
 10 CTTGAAGCTG TCCCTGATGG TCGTCATCTA CCTGCCTGGA CAGCATGGCC TGCAACGCGG 240  
 GCATCCCGAT GCCGCCGGA GCGAGAAGAA CTAATTGATA CAACACTTTC TCAACCTGAT 300  
 CTTCTTTACC TTCTACATAG CGCGTGAGCA GAACcATCTT GATGgCACAG CTAAATAATG 360  
 15 CaATgGGAAT GATGTATGAC ATTCGGGGTG CATAATTTCT CT 402

## (2) INFORMATION FOR SEQ ID NO: 1283:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1283:

25 TATTGACAAC CAGAGTACAA ACAGCAGCTA TATTATAGAC TTAGGTCTGA AGTGGTAGTG 60  
 GCGGTGGACT ATTGTTGCGA CTGGACACCC GAGATATTGC TCAGCAnAGC ATCATATACA 120  
 30 GGAAGTATTA AAAGAGACTT GncGAGTAAC AAATACTGAA GTAATAAGAT TAAAAGAGTG 180  
 AGGTGTATAA TTATCCTCGT TCTTTTATAT TAGTATGATA GAGA 224

## (2) INFORMATION FOR SEQ ID NO: 1284:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1284:

45 CGTGGGAGAT TGTGCATATT GATTATGCAA GGAAGnACGC CATAAAAGTG GATGGCCAGA 60  
 CATCATTAAT ATTATTGATA CCACATCAGA AGGTATTCAA AGTGAATCGG TGATAAGTGA 120  
 50 ATCAATTAAG TCTGCCAAAG AAAAGA 146

## (2) INFORMATION FOR SEQ ID NO: 1285:

- (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1285:

ATTTCGCGTG ACTGGACTTG GATCCGCAAC TTGGTAATTT AAGGAATTCT TGTCATTATA 60  
 AGCCCTCCAT TTCATGATTT GATTTGCCAC TCGGTAACCA TTGGGGTTAC AGCTTCACTA 120  
 GGGGAATAAC GAACCTC 137

(2) INFORMATION FOR SEQ ID NO: 1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1286:

GCTATTGATT ATGGTTAGCm TGTTGTTcWc TTTACTCATT GTTCCTTGGt TAAGCTCrAA 60  
 AAAAGCACGT ACTTTAAAGA AACATGCAGC TAATGAACAG GCCCGATTTT TAAATCATT 120  
 TTATGATTAT AAAGCTGGTA TGGATGAACT ACGTCGATTT AATCAAATTA ATCATTATCG 180  
 AGATAATTTG ATGGCTAAAT TAAATCATTT TGATAAATTA CAACTTAAAG AGCAACGCTT 240  
 TTTAACGATT TATGATTTTA TATTAAATAT TATTGCTATG CTTTCGATTT TTGGTAGTTT 300  
 AGTTCTAGGA TTAATTCAAA TTAATGCAGG CCAACTAAAT ATTATTTATA TGACGAGTAT 360  
 AGTTTTAATG GTCTTAACTT TATTTGAACA AGCTGTACCA ATGACAAATG TCGCGTATTA 420  
 TAAAGCGGAT ACTGACCAAG CATTGCACGA TATTAATGAA GTGATATCTG TACCTTCTAC 480  
 TAATGGAAAA AAACGTCTTA ATGATAAGTA TGATGCAACG AACATTTATG AAGTTAAGGA 540  
 TGCTAGTTTT AAGTATTGGA ATCAGCAAAC GTATGTnTTG TCGGATATTh ATTT 594

(2) INFORMATION FOR SEQ ID NO: 1287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1287:

TGAAGTAGTA ATAAACCCGG AACCCCTAAAA CTGGATGGAG GATGAAACCA AAAAGGAACC 120  
 AGCCAAGCCA AATTGGGGAA ACCAGGACGG CCCAATGGAG GTCCAACCAA TCCAAACCCC 180  
 ATTCCGCTAA TGnCTATGGG TCCCAATTAG GAATCCAATG GATGGATGGA TTh 233

(2) INFORMATION FOR SEQ ID NO: 1288:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1288:

AATCCCTGTA CGTTCGTAAA GCTAGCTGGn TAATAAAAAA GAGTCTGGAA AGTAGGCAAC 60  
 AATCAATGAC AATGAGCAGA TCCAATCGCA GTATGCTTAC TCGTGTAAGA AACGCAAACA 120  
 TGGTGCGTCA CG 132

(2) INFORMATION FOR SEQ ID NO: 1289:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1289:

TATCTGATAA TTCTGTACCC AGGCGTTTTA ATATGTTTAT CTGGTGTCAT GATACATAAA 60  
 CATTGTACCT TTAGGTCATA CGATGTCGCA AATAACTGCT CTGCCGTTA CAACACCATT 120  
 ACGGTTATAC ACTThTAGCC AATCATTATC TGGG 154

(2) INFORMATION FOR SEQ ID NO: 1290:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1290:

AAAAGTGGCA CATGCGGCTG TAAAGTCCTC TGTTTCTGAT AAATCATAAC CTATATACAT 60  
 GTCTACCTTC CAACTCATCT AAGAAATAAG TCATATTTTT TTGAATGTTG GATAATCAAT 120

## (2) INFORMATION FOR SEQ ID NO: 1291:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 360 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1291:

CTTAATGCTA TATATTCTTT GTTTTTGATA CCATTTCATC GTCTTCTCTT GATTTCTAAA 60  
 CAATTTAGAA AATAAAAGAA TATACGCTTC AGACTTATTA AAACCCGCTA TATCATCTTG 120  
 ATATTGTATT AACAATTGAG TAAAGCTGTG TATTAAGTCA TCTTTCTTCG ATGCAATGGT 180  
 AGTTAATGAT TTTACACGAT AAGCATATTT ATCTGTAAAT AACTTAGCAA CTACCCCACC 240  
 TAAATCATGT CCTAGAATAT GTGCCTCATG AATATTTAAC TTCTCCATTA GAATTTTAA 300  
 ATCCTCAACG TGATCGTTTA AATCGTATGA TTCACTTTTA GAAGACTTGC CATGACCTCT 360

## (2) INFORMATION FOR SEQ ID NO: 1292:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 164 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1292:

TGTGTTAGTT GTTTATGTTG TTGATATATA CTGCTCGTGC ACATGGTACC CAGACGATTC 60  
 AACGnTGAGT ACACAAAATA CAAAATCTAC GGCACATGGT ACCGTTTATA AAAGATGTGG 120  
 AACCTTACTA GCATTTGTTG AGAACGCTAC ACGTTTAAAT CAAG 164

## (2) INFORMATION FOR SEQ ID NO: 1293:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 132 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1293:

TTAATTTTCT ATATATTTCT TAGGTTATAT TGGTATCTAT GCCAGTAAGT GACATGACGT 60  
 TAGATCATTG AATCCAAGAT CGAnACATTG GGACATATTT ATTAACGACA TGGCTTCAAC 120

## (2) INFORMATION FOR SEQ ID NO: 1294:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1294:

GTCATGChTA ACAGGTGAAT ACCTAGTAAT TCAGATATTA TCATTTATAT ACCCTCTTAT 60  
 ATTTTAGTGC ATTATCTCGA AATCGAGATA CTTAATGTAA ATTTTAGTG CAGCCTACAC 120  
 TTCGTGATTG GGCAnTAGTT CTAAACGCT GTGGTAAGAT GTTAATTCAT CCTTGGTTAA 180  
 CACACAAACG CTTGGTTAAT GCTCAGCAGC TAG 213

## (2) INFORMATION FOR SEQ ID NO: 1295:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1295:

AAGAAGTTTG AAGTCTATGA AAACAATCAA AAATTGCCAG TGAGACTTGT ATCATATAGT 60  
 CCTGTACCAG AAGACCATGC CTATATTCGA TTCCAGTTT CAGATGGCAC ACAGATGAAA 120  
 TGTTTCTCGn CCAATGAGAG GGAGAACATA GTATCAATAG ATG 163

## (2) INFORMATION FOR SEQ ID NO: 1296:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1296:

TAGCTTTAAT ACATTCTGAT TTTTAAACGC TTCGAAATGT TTTCACTAAC TAATTTTGCC 60  
 ATAATCCCAA AAACCTCCTG ATTATTAAC TGCnTTTGGAT TGGCTACATT AAGGCTTTAT 120  
 ACACATCAGC TCACCATGCC CATATCTACT AATGGTTATA TCCCTAGAGT CCCAGCGATA 180  
 TAACATCAAC GCTTACnGGA GTTTCAG 207

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1297:

ATGGCATCGG TTGGTTATGA AAAGnCAAGC CATGGGGAGG CCATATTTGG GGTGGAATCA 60  
 TACCTGGAAC CTTTGGTGCC TACCACCAAT TGGTAACGGT TTTACCATCG GATTTTTAGT 120  
 GATACAGCGA TATGTTTTGT ACAGG 145

## (2) INFORMATION FOR SEQ ID NO: 1298:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1298:

TCCAAAAGTT AAAGGTCAAT TGAAACAGAn AAAGCTTATT ATGTCTGGAA AAGTATTAAA 60  
 AGTAATGGTA TCAAATGACA TTGAACGTAA TCATTTTGAT AAGGCATGTA ATGAAGTCTT 120  
 TCAAGCGTTG AATTGTGGT 139

## (2) INFORMATION FOR SEQ ID NO: 1299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1299:

GATATTGGCA ACCTTCAGCC GATGACCTCA TGGCAAATGA TTGGGAAGTT ATAAACCCAA 60  
 CTAGAGACCA GGAATTATTG AAGCAATTAT AGAAATGCTA TCAATGATAC TTTTTAAATT 120  
 GTTTTAAAC TCATTTTCAA AGTAAACAAC AGTCTTGTCT GAAATTGTTA CATGATAAAT 180  
 AGTGTTACTA GCATACACGC CGTTTAGGAA CCCAGAGTTT TTAAGTTTAT TTAAATCGTA 240  
 TTTTACATCT TCGAAATGTA GTTTTTGAAA ATACTTTGTA TGTATATCTT TAGCACTTCC 300  
 AAAATTTATT GGCAGGTAA TTTAATCGAA CCTAACTTTA CACATTCTAA ATAATCTTTG 360

## (2) INFORMATION FOR SEQ ID NO: 1300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 693 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1300:

CTACAGTGCA ATTTAACCAT GAAGTTGTTG ATTTTGAACA ATTATCAAAT GGTCAATGGG 60  
 AAGTTACTGT TAAAAATCGC CTAAGTGGTG AGAAATTCAA ACAAGTAACT GACTACGTAT 120  
 TCATCGGTGC TGGCGGTGGA GCAATTCAT TATTACAAAA AACAGGTATC CCTGAAAGTA 180  
 AACATTTGGG TGGATTCCCT ATCAGTGGTC AATTCTTAGC TTGTACAAAC CCAAGTTA 240  
 TTGAACAACA CGATGCCAAA GTTTATGGTA AAGAGCCACC TGGTACACCA CCAATGACTG 300  
 TACCTCATT AGATACGCGT TACATTGATG GTCAAAGAAC ATTATTATTT GGACCATTG 360  
 CTAATGTTGG ACCTAAATTC TTGAAAAATG GTTCTAACTT AGATTTATTC AAGTCTGTTA 420  
 AAACATACAA CATTACAACT TTATTAGCAG CAGCAGTAA AACTTACCT TTAATTAAAT 480  
 ACTCATTTGA CCAAGTAATT ATGACAAAAG AAGGTTGTAT GAACCACTTA CGTACTTTCT 540  
 ATCCAGAAGC ACGTAATGAA GATTGGCAAT TATACACTGC TGGTAAACGT GTACAAGTTA 600  
 TCAAAGATAC ACCTGAACAC GGTAAAGGAT TCATCCAATT CGGTACAGAA GTGGTTAACT 660  
 CACAAGACCA CACTGTAATT GCATTATTAG GTG 693

## (2) INFORMATION FOR SEQ ID NO: 1301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1301:

CATACTTGGG TAATGCTGCC CATGGnACGC TGGnACAAGG TAAAGTTGCA CGTTTAATTT 60  
 GTGnATGTAT ATAAAACAGA TGGGAACACC ATTTGAAGGG GATCCTCGTG CAAACTTAA 120  
 ACGTGTATTA AAAGAAATGG AAGATTTAGG cTTCACAGAC TTTAACCTAG GACCTGAACC 180  
 AGAATTCCTC TTGTTTAAGT TGGATGAAAA AGGGGAACCA ACTTTAGAAC TTAATGATGA 240  
 TGGTGGATAT TTCGATTTAG CACCTACAGA TTTAGGTGAA AACTGTCGTC GTGATATTGT 300

TCAACATGAA AtTGACTTaA ATATGCAGAT GCTGTTACAG CATGTGATAA TATCCAAACA 420  
 TTAAATTGG TTGTTAAAAC AATCGCACGT AAACATAATT TACACGCAAC A 471

(2) INFORMATION FOR SEQ ID NO: 1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1302:

CATGTGATTA AGAACGTTCA CTGATGAATT TTTGATGATC GTTCGGTTTT TGTTTGGATT 60  
 TTAATGATTA TTTATACAAA AACAGCCGTA TTTCAAGCCG TACATTTTAA ATTAACTAA 120  
 ATTTGCATCT AGTTAATAAT TGCATTTATC AAATTTGTCT TATTGATCCA ATCTAATTTG 180  
 TACTCACAAA CTAGTTTTrAA ATTCTAACTT TATCTCTCAG TTCGTTATCA ATCATCAGAC 240  
 ATAAACCAAT GAAGCAATCA GAAAACACTC TAATTTTCTa TTAGAAATTT GnTTTAATAT 300  
 AAAAAACAG GCTTACTTCA TATAATTTAT GAAATAAACC CGTCAATTTT TGTTTAATAT 360  
 GCTTGGTGAT CTnTTATTCT GCGTAATAAT GCTAAACCTG 400

(2) INFORMATION FOR SEQ ID NO: 1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1303:

AAAAGCTTAG TTGAACTTTC AACGTATCTT AGCTACTGAA GGTGCAGAAG TTTTAGAAGC 60  
 AAAAGACTGG GGTAAACTnC GCCTAGCTTA TGAAATCAAT GGATTTCAAA GATGGGCTCT 120  
 ACAACATC 128

(2) INFORMATION FOR SEQ ID NO: 1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



TCCTTCGGAT TCTAAATGGC ATTGGACAGT GTTTACAAGC TCGCATTCTT CCACTTTTTTG 60  
 CAATTTCTTT TACAATTTCT AAAGCTTCAT CAAAGTTTCC TTCAATAGnA AACGATTCT 120  
 GCACCATACA TTAGTGA CT T G 141

## (2) INFORMATION FOR SEQ ID NO: 1305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1305:

GACTGGTAAA CACTAAGTGA ATTAGCTGGA CAATGAAAAA TATCCACAAT CATTAAATTAA 60  
 CGTACGCGTA ACAGATAATA TCGGTTGAAG AAATGTTGAC GTTAAGAGTT ATGACTAAAT 120  
 AGAGTAGAAT GATGGTGAGG TCGATTTTAG TAGACTCTGG AC 162

## (2) INFORMATION FOR SEQ ID NO: 1306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1306:

TTCTTAGTTG CTCGAACTAA TAATTTGCTT AATAATGATs TAGCTGTTAT TGTGTCATAT 60  
 TCTAAAGGTG CCATAAATTT AAAA ACTATA GTAGTTGTTT TAAATTTAGT TGTGTTGTA 120  
 ACTTTGATAT GTATATTTGG TTGAGATTGT CTA CTCAAAT ATATAGCCTC CTCTATATCT 180  
 TCTTACATCT ATATTTTCT AGTGATTTTA AATTGAACTA AGCTATTTT CATATAATTT 240  
 AATGAATACA AAATAGGTTT ATCTGATTCA TTATAGTGCG TA 282

## (2) INFORMATION FOR SEQ ID NO: 1307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1307:

AAGGAAAAAA CCCTTGGCCT TTGGAAAAAA CCCAAAAGGA AAGGGGTTTA AAAAAA  
120  
AAGTTTAACC CGGTTGGCCC CAATTCCCGC CCGGGGAACC CAAAAGGAnT TTAAAAAAG 180  
5 GAAACCCAAT TCCCGGCCGG AAAAGGGTTT TTAAGCCCAA CCGGATTTTA AGGAAAACCA 240  
TTTTAAGATT ACCTGGGAAA AAAAACCGTT TAGGAA 276

(2) INFORMATION FOR SEQ ID NO: 1308:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 692 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1308:

20 TGTATTTAAT GCTCGTACAC ACAATTACAA AACTGCAAGA GAAAAAGCAT TGAGTAATAA 60  
 TCATATTCCA GAAAATGTAT ATGACAATCT AGTAAAAACT GTACATAAAT ATTTACCATT 120  
 GCTACATAGA TATACTGAAT TGCGCAAAGA ATTGCTAGGT TTAGATGACT TGAAAATGTA 180  
 25 TGATTTATAT ACACCATTAA TTAAAGATAT TAAGTTTGAA ATGCCTTATG AAGAAGCTAA 240  
 AGAGTGGATG TTAAAAGCAT TAGAACCAAT GGGTGAAGAA TATTTAAATG TAGTTAAAGA 300  
 AGGCTTAAC AATCGTTGGG TCGATGTCTA TGAGaATAAA GGTAAACGTT CAGGTGGCTA 360  
 30 TTCATCAGGT GCACATTTAA CTAATCCATT TATTCTACTT AACTGGTCTA ATACTATTTC 420  
 AGACTTATAC ACATTAGTTC ATGAATTTGG GCaTTCaGCA CATAGTTAcT TCaGTAGaAa 480  
 ATTCCaACCg TCaAATTCTa GTGACTACaC TATTTTTGTC GcTGAAGTTG CaTCAACTTG 540  
 35 TAACGAAGCA CTTTAAAGTG ATTATATGGA TAAACATCTT GATGATGAAA AACGCTTATT 600  
 ATTATTAAAC CAAGAATTAG AnCGTTTCAG AGCTACATTA TTCCGACAAA CAATGTTTCGC 660  
 40 AGAATTTGAG CATAAnATTc ATGCAATTGA AG 692

(2) INFORMATION FOR SEQ ID NO: 1309:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1309:

GGACTATTCG ATGATAGCTT TTTGACTGG ATTTACTAAA ATGAAAGCAA GTACTATATA 60

atCGAGTAAT ATCTATATAT GACATTTTAA A

151

(2) INFORMATION FOR SEQ ID NO: 1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1310:

TGTGCATTTG ATAATATTCA CTATGATTCG TGGTCATTCA CATCGTCTAC GCTCACCGGT 60  
CTAAACGTAC CTAACCCAAC ATGTAATGAA CAAATGCGAT ATTAnCACCT TTATT 115

(2) INFORMATION FOR SEQ ID NO: 1311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1311:

CACCCAACTG ACCTCAATGG TATAATGCAT TTGTGAATAC CGAATATCAT TGGAATATCT 60  
CCTATCATAG GAATATAATA TGTATATATC TTCGTAATCh TGTTCAATTTT TAAGAAAATC 120  
AATAGAAGTG TATCGATTAA AACTACATTT GAACCATTAC TTTG 164

(2) INFORMATION FOR SEQ ID NO: 1312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1312:

GAGGAAAATC GAAGTGAAAT TATTAAAATA TGGCGATGGT GGAATACGAA TAGATGGTGG 60  
TTTAATAGGC GGCTTTATTC GGGTGTTATT GTATGTAAAG TGAAAAATTT AAnCCCATTT 120  
CAAATTGGTG ATATCGTTGC G 141

(2) INFORMATION FOR SEQ ID NO: 1313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1313:

AATTGGTATT ATGCATAGTG CAATGGATGC TGGTATTAAA nTCCAGAGGA TTACAATTAT 60  
TAGTTTCAAT AATCACGATT AGTTGAGATG GTTAGCCACA ACTTTCTAGT GTATCACCAT 120  
TATATGTATC GGT 133

(2) INFORMATION FOR SEQ ID NO: 1314:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 629 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1314:

TTGCAATTAG AATGCTGTTT CACCCCTTTA AACCATACTA TATATTTAAA TTTAGAGTCC 60  
CATTTACACC AGGTTTAATA CCGAAAAGAC GCGAAGAAAT TGCAACTAAA ATTGGCCAAG 120  
TGATTGAAGA GCATTTGCTT ACAGAAACTT TAATTAATGA AAAATTGAAA AGCGAGCAAT 180  
CACAGCAAGC AATAGAATCT ATGATTCAAC AGCAGTTACA AAAGTTGACG AAAGATCAAT 240  
TGTCAATAAA ACAAATTACT TCTCAAATCG tATTGATTTA GAACAAGTAT TACaAACTAA 300  
TGGAAATCAA TATATTGAAT CACAATTgAA TAATTATTAT aCAAAGCaTC AAAACCAAAC 360  
AATAGCATCT TTATTGCCAA ATCAACTTGT AACATTTTAA AATCAGCATG TAGATAACGC 420  
AACAGACTTA TTATGTGATC GTGCAAGGAA TTATTTATCA TCTGCAAAAG GCACACAAGA 480  
TATTAATGAT ATGTTGGATA CTTTTTTCaa TGAGAAAGGT AAGTTAATTG GTATGTTGCA 540  
AATGTTTATG ACAAAGAGA GTATTGCAGA TCGCATTCAA CAAGAACTTA TACGTTTAAC 600  
ATCTCATCCT AAAGCAAGAA CAATTGTGA 629

45

(2) INFORMATION FOR SEQ ID NO: 1315:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1315:

55

ATACAGGTAC GTTCGTTATC AATGGTGCAG AACGTGTAAT CGTATCTCAA TTAGTTCGTT 120  
 CACCATCCGT TTATTTCAAT GAAAAAATCG AAAAAAATGG TCGTGAAAAC TATGATGCAA 180  
 5 CAATTATTCC AAACCGTGGT GCATGGTTAG AATATGAAAC AGATGCTAAA GATGTTGTAT 240  
 ACGTACGTAT TGATAGAACA CGTAAACTAC CATTAAACAGT ATTGTTACGT GCATTAGGGT 300  
 10 TCTCAAGCGA CCCAAGAAAT TGTGTACCTT TAAGGGGACC AATGGAATAT nTACCGTAAT 360  
 ACCTTTAGGA GGAAAGACCG GCACCTGAAA CCACTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 778 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1316:

ATAAACATTT TAAnATGTAA TThAGAAATT TTTTtagTAC AAAATCTTTC TTAATAATGA 60  
 25 TTAAGGAGGT CAGTAATGAT TGAAATTAAA ACATTAACGA ATAATGATTT TAATGAGTAT 120  
 AAGAGACTTG TTTCGACAGT CAATGAAGAA TTCACTCAAG ATTCACATTA TAGTCAAACA 180  
 ATGACTGACA CCTTAATACA TGACATTTTA AATCAAGGTT CACCGAAATG TATTGTATTT 240  
 30 GGCTGTTATG AAAACGAAAC ACTTATCGCA ACAGCTGCCT TAGAACAAAT TCGATACGTT 300  
 GGAAAAGAAC ATAAATCATT AATTAAATAC AACTTTGTTA CTAATAACGA TAAATCGATT 360  
 35 AATAGCGAGC TCATTAATTT CATTATTAAT TATGCACGGC AGAACAATTA CGAATCTTTA 420  
 CTTACATCAA TTGTGTCAA CAACATAGnn GCTAAAGTTT TCTATAGTGC ACTAGGATTC 480  
 GACATTCTTG GTTTTGAGAA AAATGCAATT AAAATCGGAA ATACCTATTT CGATGAACAT 540  
 40 TGGCTTTTTT ATGATTTGAT TAATAAGTAA TACAGTTTTA TATATTCTAC rTTTCTCATA 600  
 AATTCAAATC ATATAGGTTT TATTTTTTCAT ACAACTACTC TACTATTGAG TAGTTGTTTT 660  
 TTATTIGATA TGATAACAAT AAGTTTTTTT CAGAAATATTC TATGTTTTAG GGGTGTCAAA 720  
 45 ACTTAATGGG TAACCGCAAT TATTCATGGA nTTATCnTAA GCGATTGGGT CCTAAnTT 778

(2) INFORMATION FOR SEQ ID NO: 1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1317:

5 TGCACAAGGT GGTGCAGCAA TTGCAGCGTT CTTTATTATT AAACAAAATA AGAAGTTAAA 60  
 AGGTGTGGCA TCTGCCGCAG TATTTTCAGC ATTACTTGGT ATTACAGAAC CGGCTATGTT 120  
 TGGTGT TACT TAAACTAAG ATATCCATTT ATTGGCGCTA TCGTTGGATC AGGTATTGGT 180  
 10 TCAGCATATA TTGCTTTCTT CAAGGT TAAA GCAATCGCAT TAGGAACTGC TGGATTGCCA 240  
 GgATTtATTT CAATCAATCC AGTACATGCA GGaTGGTTAC ACTaCTTTGT TGGTATGACA 300  
 ATATCATTcA TCATTGcTAT AACAGTTACT TTAAtTTTAT CtAAaAGAAa AGCAAATAAA 360  
 15 GAAGTTGTAG AATAAAAAAA GAGGTATGAC AGTAATCAAA GTATCAGTCA TTGCAAATGC 420  
 AATAGGATGA AACTTTAAGC TGTCATACCT TThAATTTAG TTATA 465

## (2) INFORMATION FOR SEQ ID NO: 1318:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1318:

30 GACTTAATAT AACTGATCTT TTGCTATTAT TGAAACATAT TTATAAAGAA AATAGCATTG 60  
 CATAATACCC AAGCAATAAA TACTATAATA TTTTGGAAGT AACTAATCAA ACATCTAAGA 120  
 CATGATTGAT AnCACCACAG AAAAATAAGA 150

## (2) INFORMATION FOR SEQ ID NO: 1319:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1319:

45 CCACCTTTTA ACGTACGTAT CCATGAATCA TATGATTAAT TTAATATCAT TATTACTTAT 60  
 TTCTTATCTT TATThTCTTT TTTTCTTCTG AAAAGTAGTA ATGAACCTAT TGATGCTAAT 120  
 AATCCCCAAA T 131

## (2) INFORMATION FOR SEQ ID NO: 1320:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1320:

TAGTGTCCAA ATGAAAGTGT GGCTACCTAT AGCTGGTCCA TGAAGCTTTA TTTTAACTG 60  
GTTTGTACAA TATTTAAATA TCAAAATCTT CTCGCGnTTT GGACAGTTTT TTTGGTATTA 120  
ACCATTAATA AACGGAAAGA 140

(2) INFORMATION FOR SEQ ID NO: 1321:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 140 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1321:

CTTATTATAT AATTCTAATC CTAGTACATT ATACATTTTA TCAAATAGTC AACTGGATAA 60  
CTTTGAAAGT GAATGATnCT TTTAAATATA AGAAGATAAT ATAAAGTGCT TGATAATGGA 120  
TTTGTAGTTG ATGATTTAAA 140

30

(2) INFORMATION FOR SEQ ID NO: 1322:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 185 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1322:

TCGTTGCAAC ACAGGCACTA TTTTACCTTT ATATGTTGTA ATAGTTTGAT TGCTGCCATT 60  
TAAACAACCA CCTTTCTTAC TCCACAAATT TACCATGAAT AGCGCGCGCG CCATAGCGGG 120  
ATACTAAAGT GTTCTGCACC TTGCCTGTCT CCTTCAAnTT TCGATTACTG TAGAGCACAA 180  
GTACG 185

40

(2) INFORMATION FOR SEQ ID NO: 1323:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1323:

ACCTGCAATT TTCGTTATTC AAAACAATAA CTATGCAATT TCAACACCAC GGAGCAAGCA 60  
 AACTGCTGCT GAAACATTAG CTCAAAAAGC AATTGCTGTA GGTATTCCTG GGTATCCCAA 120  
 GTTGGTGGTA TGGTGGGTA nTTGGTTT 148

## (2) INFORMATION FOR SEQ ID NO: 1324:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1324:

GAAAGCATTG ATGGACAAAG ATGAACCACC AAATGAATGG CGATTAGATT CCAATTGATA 60  
 TGGCTCACGG AAAATTTATG CTACAATTGC GTCCAGTAAA CAGTGGCACT AATAGTCCAC 120  
 TTAnGCTCCC TAGTGGATGA A 141

## (2) INFORMATION FOR SEQ ID NO: 1325:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1325:

TTATACTATC GTGAAGGGTT TATTACTCAA TTAATGCCTA AAAAGGATAA AAGTTATTTA 60  
 GTTATTGATA ATTTTAATCG TATAGATACA GACATTTTCC AAACGTATAT TAATGTGTTA 120  
 GAAGGCTATG AAGTAACATT ACCACGTTAT AATAAAGACG GTAATATGAT TAAATGGTCA 180  
 CGACAAAAAG ATTCTTTCTA TTAT 204

## (2) INFORMATION FOR SEQ ID NO: 1326:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1326:



TTTGTTAAAA GTCTTCATTT CGGATGAAGC TTTATCTATT GAACGCTCCA AATTATTTAA 120  
 AGCAGCTTTT TCTTTATTAA CAGCTGT 147

(2) INFORMATION FOR SEQ ID NO: 1327:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 530 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1327:

CATThAATGA AGAAACTGAA CCCnGAACTA TACGACGCAG AAGGCAATTT AATTAATAAT 60  
 AGTAAAACAT CCAGCTTAAT CCATTGATGT GTTATAAAAG TGAAAAGCTC CAATCAAAGT 120  
 TGACGCTCAA ATAGTTTAAAC TTTGATCGGA GCTTTTTTTAT AATGTATACC GAAAGGTTCA 180  
 AATATTATAT AATGGTAGAA TTGAAAGAGA ATATAAAAAA GTGAGGATAT AAAATGAAAG 240  
 TTAATCCTAA TAATATAGAA TTAATCATTG GTGCAGTAAA AGAAGAACAA TATCCAGAAA 300  
 CAGAATTGTC TGAAGTGCAC TGAGCGGTCTG ATCTAATGTA GGTAAGTCTA CATTTATCca 360  
 ATAGTATGAT TGGCAGAAAA AATATGGCAC GTACATCACA GCAACCCGGC AAAACGCAAA 420  
 CGTTAAATTT TTATAATATA GATGAACAAC TTATTTTTTGT GGATGTTCCA GGGTATGGAT 480  
 ATGCTAAAGT AAGTAAAACA CAACGTGAAA AATTGTTGGA AATGATTGAG 530

(2) INFORMATION FOR SEQ ID NO: 1328:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 153 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1328:

AAGAAAGTTT GATCTAGGCC AACCTTTCTA ACAACGATAC GACAGTTTAA TAATGTCTCA 60  
 TATCTTGACT TCCCATGATG ATATGGTCGT TAATCACATC AATGACTTAA ATCTGGATna 120  
 ATAGATGCGA ATGGATCTTG AAAAATCATT GTA 153

(2) INFORMATION FOR SEQ ID NO: 1329:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 115 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1329:

TGTAGTTCGT TTGTGCTCTA ATTAAACGGT CGAAACCATG GATTAGACCT GCGATTACAA 60  
CTGCAATGAT ACCTGAAGCA TGAAGTTCTT CTGnTAAAA GTATACGACA AAAGG 115

(2) INFORMATION FOR SEQ ID NO: 1330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1330:

AACAAGTTAT CTACATCTGC TGATAGGCAT ACTATTACTA ATAAATAATG CATCTTTTTG 60  
CCAGATGTTT TCTTAATCAA TTGCACCAAC GAATGGCACT CTCATCTGTA Gn 112

(2) INFORMATION FOR SEQ ID NO: 1331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1331:

TTCATTGCAG ACAnTTGGTG AACCATGTGG ACGAACTAGT CCTAGATTAA GATAAGAGAT 60  
TAGTGAnCAT TGCCACCACT GCAATTAAAC ATTCTTGGAA AAATTAACCTT AAGTTAGAAT 120  
CTTAATGCAT ACAGATACGG CGAAGATGAT GCCAAAGAAC GTCACGACTT TATGATGATG 180  
ACTGAACCCA GTTTTTACGG AAG 203

(2) INFORMATION FOR SEQ ID NO: 1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1332:

ATGATGTACT AATATCTAAT AAGCTTGCTA AGTCTTGAGA CCTCATTTTA ATCACCTTTT 60

GACTATCTAT TTCTGTTAGT ACGTTTGACA TATTAATCAC TCCaCyTTAA CGCAaTAWAw 180  
 TTTAwTAGCG TTGGCTATTG TTGTTTAACG CGATGGnATT TACAACTTGT AACGTAAGAG 240  
 5 AATGAAAAAT AAGCTGnATA TGTTGTTTG 269

(2) INFORMATION FOR SEQ ID NO: 1333:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1333:

TAGCTTTTGC CCAATATGGT GAATCATGCG CCGTTCTGTA ATAATCTTCA CTTGGCATTTC 60  
 20 TTGGAATTTG AACACATCC TGTTCATTTT TATAGAnTGC TTAAATGGTA CAGCTGAAAA 120  
 ATCAAAGTAA TGTCCTTTTC TG 142

(2) INFORMATION FOR SEQ ID NO: 1334:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1334:

ACTGATGCCC AATATGCATC TTGnCAATTG CAGGTGTGCA TGAATAACA CATGACAAAT 60  
 CTGCCTGACT TTTTGCTGAC CCATAAATAA TTGGnCTAAC TTTTTCATC TTGATCTTGC 120  
 ATCCTTGCTC TCCTATTTAA AATGCTACAA ATAAATTTGC CGGCGAGTGA ATTTTAATGT 180  
 40 TTTACAACGC TGTTCAATAC CTGGGAATAA G 211

(2) INFORMATION FOR SEQ ID NO: 1335:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1335:

CTTGAATCTC TTGTGCCTCT GTGATGTATC ATCAAATTAT TTGCACTGCT TCTTCTTTTA 60

TCCGCTCGC

129

## (2) INFORMATION FOR SEQ ID NO: 1336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 633 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1336:

15	CATGATGGCh TCTTACCAA GGCGATTTTA AGAGCAATGA TACCAAGATA TTTTAAATAC	60
	TGATCAAAGT TCAGGTGGTA GCACAATTAC ACAACAACCTT GTTAAAAATC AAGTTCTTAC	120
	CAACGAAAAA ACATATAGTA GAAAAGCAAA TGAATnCGCC TAGCAATTAG ATTAGAACAC	180
20	CTACTCTCAA AAGATGAAAT TATATATACA TATTTAAATA TAGTTCCTTC GGTAGAGATT	240
	ATAATGGCGC TAATATTTCC GGAATTGCAT CCGCTTCATA TAGTCTATTT GGTATTCCAC	300
	CAAAAGATTT ATCAATTGCA CAATCTGCAT ACCTTATCGG TTTGTTGCAA AGCCCATATG	360
25	GCTATACACC CTACGAAAAA GATGGAACGT TAAATCGGA TAAAGATTTG AAATATAGTA	420
	TTCAAAGACA ACATTATGTA TTAAAGCGTA TGTTAATCGA AGATCAAATC ACTGaAAAAG	480
	AATACAACGA CGCATTAAAA TATGATATTA AATCACATTT GTTAAATCGA AAAAAGCGTT	540
30	AATTGATGCT CACTTTTTTAA AGTAACCACA ACAATGAATC CAAATATTAA AACAGCAGT	600
	AAGATTATTT TCAATTAGAA AATTTCTCAC TGC	633

## (2) INFORMATION FOR SEQ ID NO: 1337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1337:

45	ATCAATATTT AGCAGTTATC ATTATGCTTG AACGGGTGGT AAAGGCGGAG AAGTCATCCA	60
	CTTTTTCCTA TACTACAAGG ACCTTTACTT TAAACAACG AATTTACAAA ATAAAAGGCA	120
	TAATTTCTTT TCTGTCACAT CGCTCATTCT AACTACTAGA CTTTAAAAAT CGTTCCTGTA	180
50	ATTTAACTC AATCAACTnT CAATTAATGA TGCATAATAT GATTATAAGT ATAGTAGTTA	240
	ACTTCAAATA TCTTAGAAAT GTCCTGTACT ATATCTCTTT TATTCTCAA AGTCATAGGT	300

## (2) INFORMATION FOR SEQ ID NO: 1338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1338:

TACGGCATAT ACCTCGTTCA TCAATGTTTCG TAAACATTAT TTAAAACATC TCTTACATCT 60  
TGC GTTGGAA GTTCTTCATA GTCGAATTTT ATTGTnTTAT CAAAGTTTTTC CATTTGCGAC 120  
ACTCC 125

## (2) INFORMATION FOR SEQ ID NO: 1339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1339:

GAGCTTCGTT CCATTGTTAT CAAACGATTG CCATTCTGAA ATGCTGTAAA TAGCATGCTT 60  
CAAATCATCT TGTGCCTGCA GCAGTTTCTT TGnAATATGC TTCATATCAT T 111

## (2) INFORMATION FOR SEQ ID NO: 1340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1340:

TCACACGTTT AGTTTTCTAT GAATACCAAT ATTTTAACAC CATGTTTAGC CAATTTGTCT 60  
GCTAAATTAA TCGTGTGTTGT CCTCCAAATT GACACGCACC TTTAGTTTTT CTAAATAATG 120  
ATATCATCAC ATCTCTCAGT TAAAGGTCAA AnATATTG 158

## (2) INFORMATION FOR SEQ ID NO: 1341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1341:

5 GCTTCAGGTC AATTAAAACG TTCAAGAGCT TTCACATCTC ACTTATTCGC AAACAAGAGC 60  
 ACTAAACAAA AACGTCAATT ACGTAAAGCT AGATTAGTGT CTAAGAGCGA TATGAAACGT 120  
 GTAAACAAT TATTAGCATA CAAAAATAA GAACAAATAC AGAAATCGGT AGGAATTACC 180  
 10 TAAGGAGGAA TTTTTTATGC CACGAGTTAA AGGTGGAACA GTAACAAGAG CGCGTCGTAA 240  
 AAAAACGATT AAATTAGCTA AAGGTTACTT CGGTTCAAAA CATACATTAT ACAAAGTAGC 300  
 TAAGCAACAA GTAATGAAAT CAGGTCAATA TGCTTTCCGT GACCGTCGTC AACGTAAACG 360  
 15 TGACTTCCGT AAATTATGGA TTACACGTAT CAACGCAGCA 400

## (2) INFORMATION FOR SEQ ID NO: 1342:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1342:

25 GTTGAACAAG GGCAACAAA ATTTGAGCG AAACAGATTT TTGAATGGTT ATATCAAAAA 60  
 30 AGAGTAGATT CGATTGATGA AATGACGAAC TTATCGAAAG ACTTACGACA GCTTTTAAAA 120  
 GATAACTTTA CTGTTACAAC TTAAACAACT GTAGTAAAC AAGAAAGTAA AGACGGTACA 180  
 ATTAAATTCT TATTTGAATT ACAAGATGGC TATACAATTG AAACTGTTTT AATGAGACAT 240  
 35 GATTATGGAA ATTCAGTATG TGTAACGACA CAAGTAGGTT GTCGCATCGG ATGTACGTTT 300  
 TGTGCTTCTA CACTTGCGG CTAAAAAGA AACCTTGAAG CTGGCGAAAT TGTTTCACAA 360  
 GTTTTAACAG TTCAAAAAGC CCTTGATGCT ACAGAAGAGC 400

## (2) INFORMATION FOR SEQ ID NO: 1343:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1343:

50 GAAAATTTCA TCAGGTGTTG GCgTGAACG TACATTCCCA TTACACACAC CAAAAATTGA 60

TTTACGTGGT AAAGCTGCTA GAATCCAAGA AATTCGTTAA TCAGCATTTA AACAAAGCTA 180  
 TGTATGAGTC AAATTCGACT CAAACAATAA AGCCATCTAG GTCACITTTA TGGAGTGATA 240  
 5 TAGATGGCTT TTTTGTCTGT TTAGTTAATG TAAAGTTGAT AATGTAATTG TTTATTCCCTT 300  
 CTCTATTCAAT AACGTGTTTG CTCAAAATGG TTATATAAAC AAAAATCTAC TAAGTGCCAT 360  
 10 TGAAAAGGAC TTAGTAGATT TATTAAATAT ATGCGTAA 399

(2) INFORMATION FOR SEQ ID NO: 1344:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 134 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1344:

AACTTACAAC ACCAGGTAAT AACAGCAATA AAGGCACCAG TTAGTGCGGT AATGCCAATA 60  
 TCTAGGCCTT TAGGTTGCCA TAGTACGAGA TGTAGAGGTA CTAGAGGAAT GAGTGTGCGT 120  
 25 AAAGTTGTCTG TCGT 134

(2) INFORMATION FOR SEQ ID NO: 1345:

- (i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1345:

TCATAATAAA CAAGTTCACA TGAATCACAA CATCTGAAGA CAATGTTCAA AATGAGGCTG 60  
 40 GCACAATAGA TGATCGCAAG TCGATCATC ACACAGTACT GAAGCAAGA 109

(2) INFORMATION FOR SEQ ID NO: 1346:

- (i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1346:

CCATATCTGG AACGACCGAC ACCTTTACCA CCAACGATTG GTGCCATTTG TTTGCATAAG 60

## (2) INFORMATION FOR SEQ ID NO: 1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1347:

CAATTGAAAG GTGAATTTTA TAGGTCCATG ACAAATAAG GCTTGTTAAA GCTTATTAAC 60  
 ACAGTTTCAT CAAATAGTTA AATTAGTTTT TGTTTTGCAA TAAATTGGGT ATAGATTACA 120  
 AnTG 124

## (2) INFORMATION FOR SEQ ID NO: 1348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1348:

CATCAGTGGC CTGATCACCC CAACATTTGA CATCAATGCA TACCAGTTGA TTTGAACAAT 60  
 GATTGCATTG AGCTATCATC AAGTTTGTCT TTAAGCTACT AAACCCACGA ACCATGTTAA 120  
 CCCCCTGGTC ACCATCACCA ATTGCTCGAT CTAATTCAGT TAATTCAGAT TCATGTTTTT 180  
 TAAACGTTTC TTCTAAATTT AATAAACGTG CTTTCATATC ATcAtTTCAT TGTGCaCtaT 240  
 AAaTGtATAT TaTTCATATT CACTTCTnAT TTAAAGTATG ACTTGTTGTT GGTGCTAAAA 300  
 ATGChTCCAA ATATTCTGGT TTATnAGGCA CGATAGT 337

## (2) INFORMATION FOR SEQ ID NO: 1349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1349:

CAGCACGTAA ATACAACAAA GCGATCCCCA GCTTGTGGCA CATCATTAAAT ACCTGTAATT 60  
 TCAACAGGCG TTGATGGACC AGCCGTTTTG ATTCTTTGAC CTAAGTCATT ACATGCCGAA 120



## (2) INFORMATION FOR SEQ ID NO: 1350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1350:

CAATTTTACT TTGAATTTCT TTTTATCTT TTCTAGTTTT ATCGTCCCAC TCTTCAATCC 60  
 ATTTTTTAGC TTTATCTTCA TTATTAGTCA ACTTGCCTAT TTCTTTTAAT ATTcTTTATG 120  
 ATTGTATTTA TTGTATGTAT ATGGGATTGT TGGCGCTATT TTTTGGTATT TTTTATATT 180  
 TTTATCCATA GcATCTACAA CAATTAAATC TGGTTTTGcT TTAGCAACTC TTTCAACATC 240  
 ATTTTCTCCA ATATAATCAA CCCCTTTTAA ATAAGGTTTT AAAATTGAAG AATCTTTAGT 300  
 TATATCTGAA ACAGCAATTG GTTTGATTCC TAACTTTATA AAATCACCAA CATAAAATCC 360  
 AGTTAATACA GCAACTCTTT TAAGGTTCTC nGGGACTTT 399

## (2) INFORMATION FOR SEQ ID NO: 1351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1351:

TAAAACTTAG GCGGTTTTGC ATGATTATAG CGCTCAACAC GTTTGAAATT ATAGGTCATC 60  
 TCTGGTATTC TTGTACGATT CTTTTCCAA TCTAAATCAA AGTTTTCAAT TTCTTCTTTT 120  
 GAGTTTAGAC TTAATCGATC ACGTTCATGT TCTTTAAAAG ATGGAATAAC TTGTTTAAGT 180  
 GACCCTTCCA TTCTTAATTG ACCATGTGAA AACCAAGCTA TGTAGTTACT CACTTGTGaa 240  
 ATTTTATCAA TATCATCACC AATTGACACA ATCGTTAAAT TATTTTCAAT ATAATCATTT 300  
 GTTAATTCAA TCGCACGTTT CATAAATTGT GGTGTTAAAT AGTCAATAAC ATGATTTAAA 360  
 ATAATAATAT TTGATTTTGA TGAGCGTGCA ATACTTAATA 400

## (2) INFORMATION FOR SEQ ID NO: 1352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1352:

5 AAGGGAACAA AAGCTGGAGC TCCACCGCGG TGcGgCcGCT CTAGAACTAG TGGATCCCCC 60  
GGGCTGCAGG AATTGGGCAC GAGCATATCT AGTATTTTAG GACGGAGGnA GTACATT 117

(2) INFORMATION FOR SEQ ID NO: 1353:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 153 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1353:

AGTTCAGGAG AGTTATAAAT ATTAGGGTGG TACATGCCCG AAATCATTGG AATTGTTAAA 60  
20 GTAGATTTTA CAGTTTAGAG ATAACAGACA TGTCTATATG AAGGGCTGTC TACCCTCGTA 120  
AGGTTATATC CTACAGnTGA ACGTATCAAG CTT 153

(2) INFORMATION FOR SEQ ID NO: 1354:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 159 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1354:

35 TGTGTGAACA GCTCTCTATG TTTACGTTGG AAGTATGGTT TATTTTTTCAT CTTACATTT 60  
AGTTCCTTAT TTAAAAGTGA TAGAGCAATT GCACTCGTAG GTCAAGAAGC GGGATGCCAA 120  
CACAAAGTTC ACAAGAnAAT ACACTTTTGA AAATATTGG 159

(2) INFORMATION FOR SEQ ID NO: 1355:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
45 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1355:

CGnCTTCCTT CAACCATTGT AGAAGTTGTC TCATATACTT ACTACGGCTT GCTAATACTC 60

## (2) INFORMATION FOR SEQ ID NO: 1356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1356:

GGATTCATTG GTGCTTATTT ATTTACATTC AATAATGAGA nCTTTACACA ACCAATTGGT 60  
 CAAATTATAG ATGTCAACAT GTTCTTCGA CACCTACAAA AGATGCACAA 110

## (2) INFORMATION FOR SEQ ID NO: 1357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1357:

TAATGGTGGG GTATATTTAT ATTAGTACCG AATTTTAGGn GCCTCACTAT CATTTATCAA 60  
 ATTATTTAAA GTGGGATCCT ATCGCAATCA ATTGGCAGGG GCAGAATAAT GGCATTAGTC 120  
 GTTGAAGATA TCG 133

## (2) INFORMATION FOR SEQ ID NO: 1358:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1358:

GTGTCGGTAA GTCCACTTTC TTAAATCATT ATCGTCCAGA ACTTAATCTT GAGACAAATG 60  
 ATATATCAAA ATCATTAAAT CGAGGAAAGC ATACTACAAG ACATGTCGAA CTATTCGAAC 120  
 GTCAAAACGG TTATATTGCA GACACACCTG GATTCAGTGC TTTAGATTTT GATCATATAG 180  
 ATAAAGATGA AATAAAAGAT TATTTTCTTG AATTAAATCG ATATGGTGAA CATGTAAGTT 240  
 TAGGAATTGT AATCATATCA AAGAACCTAA TTGTAATGTT AAGCATCAAT TAGAGATAGG 300  
 GAATATTGCG CAATTTAGAT ACGACCATTA TTTACAATA TTTAATGAAA TTTCCAAATA 360

## (2) INFORMATION FOR SEQ ID NO: 1359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1359:

CTGTTTTAGT CTTATTGATT GCCTGACCAT TAACTAAGTA ATTTGTGTTT GAAGCGGTTA 60  
 ATTGAGCAAT GATTGGAATG TCGTATTTCT TTCTCGTTCG TGAAATGACA TTTGTTAAC 120  
 CTTCTAGGTC GTAATACGTT TCGAAAAGTA GCGCGTCAAC GCCTTCTTCA ATTAAGGTGT 180  
 CTATTTGAAT TCAGTATGAT AAAGAATAGT TTGTAAGCTG ATATCCCCCT GTTTGGATAC 240  
 CTCTAAACCC CACCAACTGG GGCCCAATAT ATACGTAAAC TnTAATTGGC nGGCTTTTTT 300  
 GCGATGCGAC GGGGGGCTGG AGGATGCTTA ACCTTAACCT CCAGACCGAA CCGTTTAACC 360  
 TTTCCAAAT TGCACCATAG GAATGGGTGG AT 392

## (2) INFORMATION FOR SEQ ID NO: 1360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1360:

CCATGGTTAT TTTCTTCACA TTTCATGTAT ATATATTGT TTATTATCTG TCTCTACTAG 60  
 ACTGTAACCT CCAACATATC TGTTTTATAA ACCAGAGAGC AGTCATTCAA TAAATAAACA 120  
 GATCTGAGGG CCAACTGGCA TGTTGTCAAC TTATGATATT 160

## (2) INFORMATION FOR SEQ ID NO: 1361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1361:

GTATCCTAAA GATTCAGTTA ATCGGAGCGT TGTATTGCAT GAAGGTACAT TGCGGAATGC 60

ATATTTATTC ACGATnTTAT TTAGCGAC

148

(2) INFORMATION FOR SEQ ID NO: 1362:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 147 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1362:

AAAATTACTA TGAAGATTGC ATTAGGATGC GACCATATTG TTACAGATAC AAAAATGCGT 60  
GTATCTGAAT TTTTAAAATC AAAAGGACAT GAAGTCATTG ACTGACACTT CACTCATnAG 120  
TGGCGACAGT GTACGTATCA GACTTAG 147

(2) INFORMATION FOR SEQ ID NO: 1363:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 108 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1363:

CTGGCAAAGA AGACAACAAC AAGCTGGTAA AGAAGCAACA ACAAGCCTGG TAAAGAGACA 60  
ACAACAAnCT GGCAAAGAAG ACGGCAACAA GCTGGTAAAG AAGCAACA 108

(2) INFORMATION FOR SEQ ID NO: 1364:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 153 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1364:

GACAATGTTG CTGTAATGGG GAAGGnAATG GGTGGTACC GCGAATTGAA TAATTTAAAA 60  
CCGTAATATA TAATCGTAAT TGTTAAGCCC TCATTTTTAT AAATTTTGGA CCTCTTGAAA 120  
AAGTTACGTT TTCAAGAGGT TTTATTTATC CTA 153

(2) INFORMATION FOR SEQ ID NO: 1365:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 184 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1365:

10

TAAGAGAATT ATATGCATTC CAAACGAAAC AACAGAAAA ACGGACCAAA CTAAGTGTCA	60
CAAGTACAAT CGCTGTACTA CTGCAAAACA CGCAAAACGA AACTTTACGT ACACACAAAA	120
AGACCACCAT TCACGTCGGG ATTATTAAAA AGGTAGTCTC GTACATTTAT TAAACTACTT	180
ACGT	184

15

(2) INFORMATION FOR SEQ ID NO: 1366:

20

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 452 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1366:

30

ACATTAGATG GGTCAATCAT GTTATACACG GTGATTTAGG GGAGTCAATC AAATATAAAA	60
GGCCGGTAAT TGATGTTATT GAGGAAAGAA TTCCAAATAC AATATTACTC GGTGCTATGT	120
CATTAATTAT TACTTATATT ATCTCATTTG CTTTAGGAAT AACGTCAGGT AGATATTCTT	180
ACAGTTTGAC GGATTATACT GTGCAAAATAT TTAATTATTT GATGTTAGCC ATTCCATCTT	240
TTATTGCGGG AGTATTTGCA ATTTTATTT TTTCTTTTGA ATTACAATGG TTCCCGTTTC	300
AAGGTTCTGT TGATATTAAC CTAAAGAAG GTACTTTTGA ATATCATATG AGTAAATAT	360
ATCACACATT TTTACCTGCA TTCACTTTAG GTTTATTATC TACTGCTGGT TATAWTCAT	420
ATTTACGTAA TGATATTATT GAAAATTCTA AA	452

40

(2) INFORMATION FOR SEQ ID NO: 1367:

45

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 141 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1367:

TTGTGAGTAA TTGGACAATA TAAGTGTGG TCTTGGATGG CATATCCTTG GTACGACCTG	60
GGCAACTTGC TTCATAGCGC AGTTAGGAAC TGATCAATCA TTGGCGTTTT GATACCTAGC	120

55

## (2) INFORMATION FOR SEQ ID NO: 1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1368:

TGGTGCAAAT TAAAACGGTT GCATATGCAC GTACGACGTA TTGCTAAATA CAATCAATTA 60  
 TTACGTATCG AAGATGAATT ATTTGAAACG CTAAATATGA CGGTATCAAA TCATTCTATn 120  
 ACTTAG 126

## (2) INFORMATION FOR SEQ ID NO: 1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1369:

TGnAAAGTTC ATCAGGGAGC CATTTTACA ACACAGGGCA CATACGGGTT GTGTTTAGGT 60  
 GCAATTGCCC CAAGCGGACA AAGCATTATT TAAAGTTTCA AGTTCTTCAA CGATTTATTA 120  
 GTGCACAGGA TCCTGTTAAG AGGTATTTTG AAGACTTCCG 160

## (2) INFORMATION FOR SEQ ID NO: 1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1370:

AGTAATTCTG CAAATGCCGC AGATAGCnGT ACTTTGAATT ATGAGGTTTA CAAATACAAT 60  
 ACCAATGACA CGTCAATTGC TAATGACTAT TTTAATAAAC CGGCAAAGTA CATTAAAGAAA 120  
 AATGGTAAAT TGTATGTTCA AATAACTGTC AACCACAGTC ATTGGATTAC TGGAATGAGT 180  
 ATCGAAGGAC ATAAAGAAAA TATTATTAGT AAAAACACTG CCAAAGATGA ACGCACTTCT 240  
 GAATTTGAAG TAAGTAAGTT GAACGGTAAA ATAGATGGAA AAATTGACGT TTATATCGAT 300

AATGGACCA<sub>n</sub> CTGATGTAGC AGGTGCTAAT GCACCAGGTA

400

## (2) INFORMATION FOR SEQ ID NO: 1371:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1371:

CATCAAGAAC ATGTGAGACC ACAATTTGAA TCACTTGAAA AAATAAATAA AGACATTGTT 60  
GGATGGATAA AATTATCAGG AACATCATT AATTATCCAG TACTACAAGG TAAGACAAAT 120  
CACGATTATT TAAATTTAGA TTTTGAGCGA GAACATCGAC GTAAAGGTAG TATTTT<sub>y</sub>ATG 180  
GATTTT<sub>T</sub>AGAA ATGAATTGAA GAATTT<sub>n</sub>AAT CATAATACTA TTTTATACGG GCACCATGTC 240  
GGTGATAATA CGATGTTTGA TGTGTTAGAA GATTATTTAA AGCAATCGTT TTATGAAAAA 300  
CACAAGATAA TTGA<sub>n</sub>TTTGG CAATAAATAT GGTAATCTCC ATTGC 345

## (2) INFORMATION FOR SEQ ID NO: 1372:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1372:

TTGAAAAGCA GTTTGGATTT ATGCTCAAAC CATGGACGAC GGTTAGGTTT ATGAATGTTA 60  
TTCCAAATAG GTTCATCTAT AAAA<sub>A</sub>CTAGT GGAAAGTGGA AAAAAT<sub>n</sub>AGT GGACCTTCGA 120  
TAATACGATG TATTTATCGT TAGAAGCAGT AATA 154

## (2) INFORMATION FOR SEQ ID NO: 1373:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1373:

GAGCCTAATT ATTCAAGCCA AATCGCATAT GAAATTGATA AAGAAGTTCA ACGAATCGTT 60



CTATACnAGA ACTATC

136

(2) INFORMATION FOR SEQ ID NO: 1374:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1374:

15	ATCTTTAACA ATTAAAACCA TACTATCTTG AATCATCATC AAATTTAACG CATGTGCGTC	60
	AAGTTGTTTC ACTTTAAAGA CTTCAATTATT AAGACCGACC TTAGACTGCT TTTTAAAAAT	120
	AGGTACATTC GTAATCATAC CTATACTTTG ATTGTCTAAG TGTAATTTGT TTTGGTGATA	180
20	TCGATTATAA TCTTGTGCAG TAAAGCTGT AATCATTACT GATTGTCTTG AAAATATCGC	240
	GCCTTCATTA CCAATGAAGT CTATTGGaAT aTCATCACTA GCCTGTTTTA ACTTGTAATA	300
	AGCACGATTC TnTTCTAAAG AAGCTCTAAA TAATGTCGTT TCATATACTT TGAAGTCT	358

(2) INFORMATION FOR SEQ ID NO: 1375:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1375:

35	ATATTGTGTG CTAAATTTGC TTAAGTATGT TTTTGTGTTG nAAGTAAGCA TATGTTATTG	60
	TCTTTTAAAT TGTTGTAAAA GTGCTGTTTT CATAGAATTA ATATCAGACA TCTTTATTAG	120
40	TA	122

(2) INFORMATION FOR SEQ ID NO: 1376:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1376:

55	CATTTTCTTC GGTTCCTGTC TTTTATGCG TAGATTTATT TTCTGTTCT TGTTATTAC	60
----	--	----

CGATAATTAC GATGGTAATA AGAAGTTTTT TCAAATATAA CGCCTCCATG TTAATGAAAA 180  
 GTAGTTGATA CGTGAAGCTA AATAATTnAT TTCAATATTG CCATAATCAT TTTAAAAAAT 240  
 5 AAATATTAGA AAAGTAGGCG ATATTAATAT TTTCATTGTt TTTTGTGTAC TTCAATTAGT 300  
 ATAACAAAAC TGTTATGTAT TTATAAATAT AATCATTAGT ATTTTATATGG CTGAAAAAGT 360  
 TATAATAAAA GTGTAAGGAA TAAAATATTT GTATGGAAAA GAGAGATAAT TATGAATAAA 420  
 10 ACCAGTAAAG TTTGTGTAGC AGCAACATTA GCATTGGGCA CACTGAT 467

(2) INFORMATION FOR SEQ ID NO: 1377:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1377:

AGGTGTTAGA ATTTATTTTA AGTGTTATAC GTGTCTTCCA GAAATTGTAA TGGCATTATA 60  
 25 TTTATnAAAG TGTGGCAGG TTATTTTCAG GTGTATTAGT TTAGGTATCA TTCGTAGTAT 120  
 GCTTGGGA 128

(2) INFORMATION FOR SEQ ID NO: 1378:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1378:

GGACGCTAGA GGATCCCGGT CTGGAAAATA TCGTCCAGAA CTTAGAAATA TGAAAATATT 60  
 CCCAAGACCA ATCGATAATA TATTGCCAAT ATGGCGTGCT GTTGGTGGTC CACCTGCAAG 120  
 TGCTATTAAA GCGGGAAAAC AAGGTGTGCC AATGATGATT ACAACCCTTG GTGGCCCAGC 180  
 45 AATGAACTTT AAAGGTTCTA TAKATGCTTA TCGTCAAKCG GCAACTGAaG CAGGTTTTCGA 240  
 TGCTTCGCCT AAGTCTTTAC CAGTAAGTAC AGCGAGTCTG TTTTATACAG CTGAAACAAC 300  
 TCAGGATGCT ATGAGAGAAT TTTATCCACA TTTGAATACA GGGATGTCAT TTATTCGTGG 360  
 50 TnGTTGGTTA TCCGAAACAG CAATnGCTAA TTCGTCAGTT 400

(2) INFORMATION FOR SEQ ID NO: 1379:

- (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1379:

10 AACTACAACA ATTTAACGAC CAACCTTAAA AnAATACGCT CTTATGCATT GGATTAGTCC 60  
 TGATTATACA ATTTAAGTGA ACAAATACCC ATCATTTAAA AGACTTAG 108

(2) INFORMATION FOR SEQ ID NO: 1380:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1380:

25 AAGTGGGGGG AATCAGTATG TTACATTTAC ATATATTAAG TATTAGCGAT TATTTTATTT 60  
 ATCGCTACAT ACTTAACCAT TTCAAAAATT CAAGGCGGnT CACCATTTTC CAACCCGT 118

(2) INFORMATION FOR SEQ ID NO: 1381:

30

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1381:

40 TCATGAAAAC ATTTATTTTA AAATTTGATA TTTGTTCAAT AATATTCGAA ATTAACThT 60  
 GTGTATAGAT TTTCTTTATA TCCTGAGAGA CATGTACTAT AATGTTTGTG AATA 114

(2) INFORMATION FOR SEQ ID NO: 1382:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1382:

55 CGGTATTGAT CATATAAATA GTGTTTAGAT GCTATAGTCG GnTGACTTAA GTAATTTAAA 60

GTTTTCTTCT GCCTTGCTTA AAGATATATG ACAGGGTGCT GGCAT

165

(2) INFORMATION FOR SEQ ID NO: 1383:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1383:

TTTGGTGTGA TGGAGTATAT TTAGGTGTGG AAATCAAGAG GGAATTCCAT TTTCAAACAT 60  
 CCAATTAGAG TCGnAATAAG AACTCGCTAT CGGTCCAATT AACTGATTCA G 111

(2) INFORMATION FOR SEQ ID NO: 1384:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1384:

CATTAAATA AC GTTGTGAC CATGTGCTTT ATGCTATGTG CTAGAAAATC CATGTTTTTA 60  
 TCTAATTTCT TAATAAATTG ACATTAAGTT GGATTCTTGT CnCTTCACG TTTCGACATT 120  
 GGATGACTGA ACGCATGAAA TCAG 144

(2) INFORMATION FOR SEQ ID NO: 1385:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1385:

TCGTTGTGCA GCAACTGCAT TACGCTGTCT CATTAAATGTA AGCGCAATGG CCATTGTTT 60  
 TTTCnATAGT GGAATACTTG TCAAAATTGA ACATTGTATC TTC 103

(2) INFORMATION FOR SEQ ID NO: 1386:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1386:

5 CCAGnACAAA TACAACGTTA TATTCAACAA TTAGAAGACT TAGnATAGAT ATAAATTGAG 60  
 GGAGGACATC GATATGGCAT TTGAAGGGTT ATCAGAAACC TTGCAAGCGA CGATGCAAAA 120  
 AATGCGTGGT AAGGGTAAAC TTAAGTGAAGC TGATATAAAG ATAATGATGC GTGAAGTAAG 180  
 10 ATTAGCGTTA CTTGAGGCTG nACGTAAACT TTAAAGTGGT AAAAGAATTT ATTAAAACAG 240  
 TATCAGAACG CGCATTAGGT TCCGATGTAA TGCAATCATT AACACCAGGG CAACAAGTTA 300  
 TTAAAATAGT TCAAGATGAA TTAACGCAGT TGATGGGTGG AGAAAATACG TCGATTAAAnA 360  
 15 TGTCAAATAA ACCACCTACT GTTGTATGA TGGTTGGTTT ACAAGGTGCT GGTAAAACAA 420  
 CAACTGCAGG TAAATTAGCA TTATTGATGC GTAAAAATA CAACAAnAAA CCTATGTnAG 480  
 TTGCAGCAGA TATTTATCGT CCAGCAGCGA TAAATCAATT ACAAACAGTA GGG 533

## (2) INFORMATION FOR SEQ ID NO: 1387:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1387:

30 TTATTTACAA GCCATTAATA TATTTTAGGT TTGTTCTGCA TCGATTCATT GGIGCTATTT 60  
 TATTTACATT CAATAATGAG ACTTTTACAn CAAACCAATT GGTCAAATAT AG 112

## (2) INFORMATION FOR SEQ ID NO: 1388:

## (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1388:

45 ACACCTACAG TTAATAGTAT CAGTGCACAC TAAAGTCCTA ATACTTTCAA CCATGACTAA 60  
 TGATGTATCh TCTTGCCCAA CGAACGCGTT GTGCCAAATT GAATTAGACT GGACGGAC 118

## (2) INFORMATION FOR SEQ ID NO: 1389:

## (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1389:

CGACGACACA ACTTTATAAT AAAATCTTAG ACAATAACGA AGGGTATTAA CAGAACTTGG 60  
TGCTGTTAAT GCAAGTACTG GAAAATATAC TGGTCGTCGC TAAAGCAAAT TTTTGCTCTG 120  
ACCTnCAATG GTACTTGTTG GGGAATA 147

(2) INFORMATION FOR SEQ ID NO: 1390:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 161 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1390:

TTTTTGATCA TGATTTTTGG GCATGGATCA ATCACTTGCT TGGCCAATGG TCTTTCAACA 60  
ATTGCGATAT CTGACCTTAT TCGCTTTATC TAGCACTTTT GnCAATTTGT TGGCATTGGA 120  
AAACATGTGT TTAGATTTTT GTATGCCTCT CGCAGGCTTT T 161

30

(2) INFORMATION FOR SEQ ID NO: 1391:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1391:

40

GCCGCACGCG CGCGATTCTC GGCCTAATAA GAAAACAAAT AATTCCAATT CATATATGnA 60  
CATTTTTGCC TCCTTATTTT TGAAAATGT GGAATTGGAA TT 102

45

(2) INFORMATION FOR SEQ ID NO: 1392:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 412 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1392:

55

AAAATGCTAT TAACAACGTA TTAAATAATC AAGATTACCA TGGTATTAAA GATAAACCAT 120  
 TCGCATTATT CGTAACTGGA TTTTTCGACA ATGTAACAGA TAATACTGTT GGTATTAACT 180  
 5 TTAAGACAAA AGACGGTTCA ATAGCAGTAT TTATGCGTCC AGATATTGGA GAAACATTTA 240  
 GCGAGTTT TAG AACATTCTTA GCCGCTTGT TAATGTTGTT ATTATTTATC TCGATTTCAT 300  
 TAGTTATCGC ATCAnCCTAT TCAATCATTC GTCCAGTAAA AAAGTTAAAG CTAGCGACCG 360  
 10 AACGCTTAAT TGATGGTGAT TTTGAAACAC CTATCAAACA AACnCGCAAA GA 412

(2) INFORMATION FOR SEQ ID NO: 1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1393:

AGCAAnTGGA TTGCAATGAG TTTCTTATAT TTACAAGGTG GTAGATTGAT TGATGTTTTTA 60  
 25 ACTGCGATAT TAGCAGTAGT CTAGATACCT AGTCACTGAG ATTTTAGATC GAGTTACACG 120  
 CACATTATCC GATCTGTCTA TATGGATATC CGTATGACTA CCTATCCCAC GGACTGCACA 180  
 TACTGG 186

(2) INFORMATION FOR SEQ ID NO: 1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1394:

TCTTTAAAAG AATCAGGAGC TTGGAAGAAG TATATCAGGA TCATTAAGTC AACAAATTAC 60  
 45 GCGATATGAA AATTTGAATA ACAATTTGnA AAAGCATGCT TCCGATAATC AGCAAGCC 118

(2) INFORMATION FOR SEQ ID NO: 1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GGTTACCTCG GATGGATGAT TACTATTTTG GGCTGGGCGC CGGCTTTnGT TATTAGTGGT 60  
 GGCAATAGTG GCAAAGTGTC ACAAAAAAAT CCAATAGCTG GAAACCCGGG TATATTTGGG 120  
 5 TATTAACGCC GGTGGCCGGG ATTTGGCCAA TCGCATTAAAT TTAATGGCCA TTGGG 175

## (2) INFORMATION FOR SEQ ID NO: 1396:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1396:

AGAAACTTAG ACGATTAGTA TCATATATTA GAACACnGCA CCGAACTTGA AATCATGGCT 60  
 20 GATATCGCAC CTTGAAGAAG CAAAATGCC GCACGACTTG GCTTTGATAT ATTGGCACGA 120  
 CTTACATGGC AT 132

## (2) INFORMATION FOR SEQ ID NO: 1397:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1397:

AGAGGTCCGG CTATCTATCA AATAAAGTGG TCATTTAAAG CGTACACTTC GGGTGC GTTG 60  
 35 ATTTCTTACT TTAGGTGTAG GACAAATTGTA TCGCATCTAT CTTTACnCTA CCTGCATTGT 120  
 T 121

## (2) INFORMATION FOR SEQ ID NO: 1398:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1398:

CGTTCGTATA ATCTCACTTG CATCnTGAAT TGAACAACAT CCTGTCATTT TAAGACTGCT 60  
 50 AAAnGTACAG CTGAAAACCA AGTAAGTCCG TTTCGTCTGG CTGTGAAATG GATCAAGGAG 120



AAACACCTCA TCCAAAGTTC AG

202

## (2) INFORMATION FOR SEQ ID NO: 1399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1399:

CGTTGGATCA CTGATGCATT CATAAATGGG TGAACnTAAT GTAATGTTAA ATCTATCACA 60

GCGCGATAAC AGCAAGAATA TAGTGAACAC CATAAATTGA GCATATCAAT GCCATATTCA 120

TGGATACACA TAGTTCACCT GGTGGTCGGT GAAAGCCTGT AGATG 165

## (2) INFORMATION FOR SEQ ID NO: 1400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 107 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1400:

ACACCTTTGT TTTTGCAAAG CTGTACCACA AAGTACTGGG TAGAATTCTA CGTTATATGA 60

GnCTTGCGCT ATAGCTTCTT TTAATTCATA AACTGTAAAT TTCTTCG 107

## (2) INFORMATION FOR SEQ ID NO: 1401:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1401:

TTTTGTCTAG nAACATCTGC TTCTAATAAT GATCGATCAG CAGCCATTGT GCTTAATCTT 60

TCATCCCACA TCACAATCTC AATAGAAGGA TAAGCTTCTA ATAATT 106

## (2) INFORMATION FOR SEQ ID NO: 1402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1402:

CAATGTTAAA CCTACACCGT TAACAGCACA CATGATACTA AATTGTTGGG GTGTCATATT 60  
 5 ATACAATGTT GAGTAAATAA TGGCGATGCA GATGAATAAC TA 102

## (2) INFORMATION FOR SEQ ID NO: 1403:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1403:

TTTATTATTT GTGCTACAAC TACTTAAAAA AATCAGTAGA TATAGCATT A ACATATTTT 60  
 20 CATCCCCyTG AATTTTAAAA ACTTTTTC A AAGCAACACC TCTAAAAATA AATaCAATAT 120  
 ATTATAGCAA ATAGAAATTA TTATTTTGTT AAATTATGTT GTnCATGTT 169

## (2) INFORMATION FOR SEQ ID NO: 1404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1404:

TTAGTTGATA AGTAAATCCG AGTGACATTG GGATTCACCC CAACCGACTC TATTCCAGTC 60  
 35 TGAAATACGT GAACCCATAA nATCCTATGT CCAGATTTAT ATTCT 106

## (2) INFORMATION FOR SEQ ID NO: 1405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1405:

TATTTTGTGCA GCAGAGATGT TCGCGACAAG GTTTACGCCA AATTGTCACT GCTACTGCGA 60  
 50 TGTGTATTGC ATGCAAGTGC AGGnAATATA TTGAACATTT AAACGATCAG TTTAATTGCA 120

CTTTAATAAG CAATTTGTAC TGACTGTCTGA CATTGCGTCA TGGTCTGTTT TTGTTTAACT 240  
 ATACTATnGG TGC GAAGTAG GCCTATGTTT AGAGGTCTAA CATGCCGTAG GTCTAATGGA 300  
 5 TCAGGAACC 309

## (2) INFORMATION FOR SEQ ID NO: 1406:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1406:

GTGGACCTGC AGTTAATTCA ACGATTTC AA GATGGGCGCC AAGAACGAAA CGTGGCCGAT 60  
 20 ACTTAGGATT CTGGAATCAT CACATAATCG TGTGCATGAG GTGTTTCACT TTGGGGTCTA 120  
 ATGATTCTTC ATGGAAnGTA TAGG 144

## (2) INFORMATION FOR SEQ ID NO: 1407:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1407:

ACCTTTGCGT CCAGAATTAG CTACATGGTA AAGCTTCGTG TTACTATTTT AGGGATATCT 60  
 35 TCAACnCGTT TCACTTGTAT AATTGTTTT TGTAATTGGT GAAGTCATAG TATAG 115

## (2) INFORMATION FOR SEQ ID NO: 1408:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1408:

ATTGGTATTG GCGCTGTAGT ATAGCTTCAT TATCTGATGC CATTAGTATA CGCACACTnT 60  
 50 TTATTTATGG GCGTGGTATT CATCCTTATC GGGATCAATT ATTGGGTTAC ATTTT 115

## (2) INFORMATION FOR SEQ ID NO: 1409:

(A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1409:

AACCAGATGa AAAGCAAATA TACATATATA ACTCTACATG GGGTCGTGGT TTGGATATTG 60  
 TTCATGATGC ATTCGGTATG CCAATGACAA AGCAATATAA AGATAAATTn CAAGAAGATA 120  
 AAA 123

## (2) INFORMATION FOR SEQ ID NO: 1410:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1410:

CtnTTTATAT TGAGGATTTT GTATCATATA TGGATAATCA TTAAAGGTGT ATGCTCTTGT 60  
 TATCAGATCG CTACGGGTAA AATCGCTTCT ATAGGGCATT TACATGCGGG CTTCTGCCGG 120

## (2) INFORMATION FOR SEQ ID NO: 1411:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 455 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1411:

TCTCGTATTG CGTTTAGAGA ACATGCGCAC AAAGGACAAA TTCCAGGTGT TAAAAAATCA 60  
 AGTTGGTAAA ATCAAATTC GTACTTTAGC CCATTTACAA TATCAATAAA ACAATGTACA 120  
 GTATATACGA ATGCTATAAA CTGAATGTTT TCTCATATTA ATAAGGAAAC ATTCGGTTTT 180  
 TAATTTGCAT TAAAAAATAA TTAGTTTTTA AAGGGGCTAT TTAAAGTGAA AATATTTGAT 240  
 TACGAAGATA TTCAATTAAT ACCTAATAAA TGCATAGTTG AAAGTAGGTC TGAATGTGAT 300  
 ACAACTATCC AATTTGGTCC GAAAAAATTC AAGCTACCTG TAGTTCCTGC GATATGCAA 360  
 ACAGTTATGA ATGAGAAATT AGCGAAATGG TTTGCTGAAA ATGATTACTT TTATAATCAT 420  
 GCATCGTTTT GATGAAGAAG CAAGAATACC TnTTA 455

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1412:

ACAATGTCAA ATCACAATAG CTGTTGTAGG CATTTGATTA CAATGAACTA AAGGCAAAAT 60  
 TGGAGCAGTT ATCCATGAAT GATTAATAAC AACAnAAAAGT ATGGGGTCAA GTTTAGGG 118

## (2) INFORMATION FOR SEQ ID NO: 1413:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1413:

TGTTGACGAT ATAGGAATTA GCAAGAAATA GGCTAAGATA GTTTCGCACA ACTTGGGGCC 60  
 CanCCACTTG CTTGTTTGTGA GAATTAGGGG TCCATTTCTC GTGTTGGGGC CCGAACTAAT 120  
 AGTATGAATA TATATATCTA ATATTAAAC GGCAATATTT ATATGGTATA CATTTTATATA 180  
 TTTAGTnTTT GTATAGACAT GCTAATTAGC ACTTTCTAAA AAGGGTTGAA ATGATATACT 240  
 GATGA 245

## (2) INFORMATION FOR SEQ ID NO: 1414:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1414:

TTTTTGTTAT TCAAAATTTA GAGTGTGTTA TATGATAACG GTTTTTTCAT AGCGACTTGA 60  
 TCATTTTTTCG AAATGATGAA AGATATGCAA GTTCAATCAA TCGGAACAAA AATACTATAT 120  
 TATGGTAAGA AnTTCCCGAA GACTAGCGCA CTCACACACA AGTGCATCCT CGCGAACAAT 180  
 GCGCACTTTT CACAAGCACA CAAACACAAG GCACAAGTGC ACGCAnTATT AGACAATGGT 240  
 CTACCTACCA GA 252

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1415:

ATCTGCTGGA AGAGAAAAAA GACGCTCTTA AAAGTGGCTT TAGAAGGTCA AGATATAGAA 60  
GnTATTAAAT CTAAAAAAGA AGGAACTTGA AAAAGTGATT CCAGGAATTT TC 112

## (2) INFORMATION FOR SEQ ID NO: 1416:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1416:

CTCAATTACA TTCAAGAAAA TGGGTGGAAT TACACAACGT TGGACTGAGA AGTATAGTTA 60  
ATAGCGCAAA TGChATAAGC CTTATATAAA AATGGGCACA ATTATTTTCAT GTACCAACAA 120  
GAAC 124

## (2) INFORMATION FOR SEQ ID NO: 1417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1417:

TTCAAGAGCA CATACTGTAA CTCGTACGAG AATTTTTTCA AAATGACGCG TCAATCTCAA 60  
TATCATCATA TGGTATTCCG AGTAATACCC CTCGnCACCT TTTTtaggTA GCGTCAATAT 120  
T 121

## (2) INFORMATION FOR SEQ ID NO: 1418:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1418:

CTACGCCATC AAGAGGGTGT TAGTGCTATT AACTATTGCG GCGAGAGCAA TTAGTCGAAT 60  
 5 GCAAATTAGG ACAAGTTGAT GAGTAACTAC nGCCAATATC GGTAAGTTTC ATGGCGGTTC 120  
 AGC 123

(2) INFORMATION FOR SEQ ID NO: 1419:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1419:

20 CTTATAATCC TTACnGCAAT TTCACCTTGT ACGGAATTAA ACAACGGAGG CATTACTTA 60  
 CCCCCTTTAC TTAATACGTA CCAAACTTG GTCGTATTCA ACCATTGGG 109

(2) INFORMATION FOR SEQ ID NO: 1420:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1420:

35 GCTGTnGTGC TGCCAAGATG CTGATTGAAA AGTATATATG ATTGCATCAG TAGAAGAGCG 60  
 AGCAGAAAGA AGATATAAAG ATAATCAGTT AAGAGGTGTC GAATCAAATT TTGAAGATTT 120  
 A 121

40 (2) INFORMATION FOR SEQ ID NO: 1421:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1421:

TGTTTTTACA GTCACATACA CTAGGCATCC TAGCATTATC TAAATTTAAT ACCATCGCAA 60  
 CTTGCGCTTT AATCTTCAAG GCCAATTAAA CCTCCTTCAT CTTTCTAACT GCTTAnATAT 120

## (2) INFORMATION FOR SEQ ID NO: 1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1422:

GCCAATCATT GTCAATGTTT AGGCATCAnA TTTATCGAAT GATTTTCATT TGCCATGATC 60  
 AGTCAAGGCG GGGATTTATT CAAAAATTAT GACGCCTAGT AAAAAATTTT 110

## (2) INFORMATION FOR SEQ ID NO: 1423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1423:

ATTACCTTGC ATGAATTTCC ATCTGTCAAA TGTGCGCCTT CACGAATTTG TTCGATAAAG 60  
 ATACGTTGGT CACCGTGAAT AATTTACCA GCTGCATTTn TCCATGGACC A 111

## (2) INFORMATION FOR SEQ ID NO: 1424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1424:

TGTTGTGTGA TTGCGTATTC TCAGGTGAAT TCTTACATAT ATAGTACTTT TTGTTTCCGC 60  
 TTGATTTGAC CTTGCATATC TTTACATTC TTCGAAAATT GATCAAAGCn CTATTGAAAA 120  
 ACCGTATCAT ATACAnACCT CTAATTTTTT TGAATAACAA AAAGAATTCT TTGACGTATC 180  
 AACTATATCA TCATGACTTC 200

## (2) INFORMATION FOR SEQ ID NO: 1425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1425:

5 TTTCTATAAT TTTAGACTAT TTCTACCATG TTGCTGAACA ATTTACTTAG ATAAAAATTA 60  
TnAAATTTTG GTCAATTAAC AAAGTTAGTT TGTTAAAACG TATACTTTAA TTATTCGG 119

(2) INFORMATION FOR SEQ ID NO: 1426:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1426:

20 AAAATGGCGT TGCATTTTAC TCTAATAACG CTCAAGGCGA CGGCAAAGAT AAACATAAGG 60  
CACCTATTAT CGAACATAGT ACTCCTAnCG GACCTGGAAT TTAAATCAGA GCGGCC 116

(2) INFORMATION FOR SEQ ID NO: 1427:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 212 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1427:

35 TTTTATTTAC GTATAAGTGG GCGTTAGGTG TCACAGCGGT TGTCGATCAA AATATCATCA 60  
TCAATCTTGT ATATGGGTTT GCGGATTCTT ATTTTATGAT TTTACAGAAC TATCCTAGGC 120  
TTATTCTTTA TTAAAAGATG CAACnAGTTA TATAAAAAGA CGAATCTATC AACGCGAGCT 180  
40 GCTCACAAGG CATCTCnTAT AGCGTCCACA TC 212

(2) INFORMATION FOR SEQ ID NO: 1428:

45 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 265 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1428:

GAAAAATTGG TTCTGAATAT AATGGTGCCG TATACTTTAC GCCTCAAATC AAAGATTTTA 60

ATTTTAATGA AAAACATCGG TCGAATATAA CATAAAAAAA CGTCTATATC AAAAGCATCA 180  
 TGAATAAACA GAGGAGCACA AAAATGAnTA AAAATATAAT CATCAAAAGT ATTGCGGCAT 240  
 5 TGACGnTTTT AACATCAATA ACTGG 265

## (2) INFORMATION FOR SEQ ID NO: 1429:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1429:

CGTACGAAGG ATTTGCAAAC TTCTTCATTC AACAAAGCTAA AGAAGAACGT TTCCATGGAC 60  
 20 AAAAGATTTA TAACTATATT AACGACAGAG GTGCACATGC AGAATTCAGA GCAGTTTCAG 120  
 CACCAAAAAT TGACTTTTCA AGCAT 145

## (2) INFORMATION FOR SEQ ID NO: 1430:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1430:

ACACCGCTAA GCGTATTAAG ACAGGATCTG AAAATGGACA CATCGCAATC GAATTATTGC 60  
 35 AATGCCAAGT CATATCGGGG GTGAACCGCA ATTTTCAGGnA TTAAGTGGAT AGGTA 115

## (2) INFORMATION FOR SEQ ID NO: 1431:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1431:

nATGTATTnG TGAAAAGGTC CTGAGTGGAC AAAAGACCTA AATATTTAAT GGTGATTAT 60  
 50 CGCACGTCCA TAGTTGGTGA ACAGGAACTT ACACGTACAT CTAATCGCAG ACTATGCGTA 120  
 AACTTTGGAA ACTGCTAGTC ATTGAAGCGT GGTATGTGTA TGCACGTAAA TATGCATTAG 180

## (2) INFORMATION FOR SEQ ID NO: 1432:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 145 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1432:

GGAATGATTG ATAAATTGGA CTA CTCTAAAG ATTTCGGTAT CGTGTCATTT GGCTCAGTCC 60  
ATGTTTAATC ACCTATGnTG ACATGGTATG ATATTAGTGA CTACCAGAGA TATGGATGAT 120  
TTGGAACGTG GAGGACTTGA TCGTT 145

## (2) INFORMATION FOR SEQ ID NO: 1433:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 169 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1433:

TTTATTGCAT TTACATAATA ATATCCTTTT GTTGTTTTGG TATTTCTATT CATATACAAG 60  
ACCATACCTT TAACTTTCAG AGCTTCCCCC TTATTTTGAG TTGCCATTTC AGAACCAATA 120  
ATCCATGTAC CTTTATCATT TTTATCAAAT TCGTCATCAC GATAACCTn 169

## (2) INFORMATION FOR SEQ ID NO: 1434:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1434:

GATCTATAGT TCTGTAATCT GACGTGCTTT GCCATGTGCA CCACTCGTCn TAAAAATCAC 60  
TTACACTTAA CCCTTTTCCA CCTTTATCGT ATCCACCTTC AA 102

## (2) INFORMATION FOR SEQ ID NO: 1435:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1435:

TTCTTATTAT ACAAATAGAA GCCATGTGTG CTTATATCGC AGCATCATGA CTCCTTTTTC 60  
 ATTTGAATAT ATAAATAATA CAGnCGCTTT CGAATAAATT TAGGCTAATT CTACCA 116

## (2) INFORMATION FOR SEQ ID NO: 1436:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1436:

GGGGGTTTAT GTACTGGTGG ATCTGCAAAC TACTTGGCGT AAAGAATATA CAGATATGGT 60  
 AAnGAAAAGT TTAGATTCAC ACGCCATCAC AATGGATTAG AAAAACCGAA TTTCTTCAGC 120  
 AATTCTACAA TTTCTAGTAT ACGC 144

## (2) INFORMATION FOR SEQ ID NO: 1437:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1437:

GTTGCTGGGn AACCTATGGT CGAACATGTA TTGGTAAAGT GTGAAAGGCT CTGGTGGCGA 60  
 TCAAGTTGGT AACCATCGTA GTACATGGTG CTGTAAATGT A 101

## (2) INFORMATION FOR SEQ ID NO: 1438:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1438:

AAAGATGGTG ACATTTTCATA TAATCCGAAT GTGCCAAGTT ATTCAGCAAA GTATCAATTA 60  
 AGTAATGATG ACTACAATGT GAAGCAACTT AGAAAGAGGT ATGATATACC AACTAnGAAA 120

AATTTAGAGT TTACATTTAT AGAAAATAAA GAAGAAAACA TCTATTTTAC GGATAGTATT 240  
 AATTTCAAAC CTACTGAATA GGGTTAATAG AAGTTTGAAA TGAAAATTTT hTAAAGTGTG 300  
 5 CAAAATAATT TGTCGCTTTA G 321

## (2) INFORMATION FOR SEQ ID NO: 1439:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1439:

CAGTTGTAAT GGGACCTGGG CCAATCGGAT TACTTGTAGC ACAAGTGTTA AAAAGTAAAG 60  
 20 GCGCAACTGT TGTGGGTACT GGGTTGGGAC AATTGACCAA GTCAGATTAG ATTAAAGCCA 120  
 GAAAGCCATT GCCAC 135

## (2) INFORMATION FOR SEQ ID NO: 1440:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1440:

AAATTATTTT GAACACTTTA TGAAATTTTT ATTTCAAAC TCTATTAACC CTATTCAGTA 60  
 35 GGTTTGAAAT TAATACTATC AGAAAAATAC ACATTTnCTT CTTTATTTCT 110

## (2) INFORMATION FOR SEQ ID NO: 1441:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1441:

TCTCTTTTGG ATTCATTAAG ATTGCnGCAT CGATACCAAC GTTmAACGGT GATTGTGTAA 60  
 50 TGAATTTTGG CCACCAAGCT TTTTAAACAT TATTCTTTAA TTCAACACCT AAAGGACCAT 120  
 AATCCCATGT GTTTGATAAA CCACCGTAAA TATCACTACC AGGGAACACA AAACCTCTGT 180

GAAAACGCCC CATGGAAAAT AACAGCATAG TAAATATGCT TTACTTCCAT GGGACGAGTT 300  
 AATATTTTAA ATTGTATATA ATACAAAAnA AGTnACGTAT TTAACCCGCG GTTCCACCCA 360  
 5 AATTAGTGTA GTCACGCT TTTATTTTAA AATGATTCGT TCGCCAATC TTATTGTTAA 420  
 GCTTACACTA TCCTTA 436

(2) INFORMATION FOR SEQ ID NO: 1442:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1442:

20 ATTTTGTAGAA GCATACTGCG AACGTCATCA CATCGATTTA CATATCAAAA AGTTAGATTT 60  
 GTCGCATAGT CTCGACCGAA ATAACAGCAT TCAGAATGAA GCTCGAATTA AACGTTACGA 120  
 ATGGTTTGAT GAAATGATGA ATGTATTAGA AGCGGATGTA TTGCTAACGG CGCATCAITTT 180  
 25 GGACGATCAA TTAGAAACTA TTATGTATCG TATTTTTAnT GGGAAATCAA CACGTAATAA 240  
 ACTAGGATTT GATGAGTTAT CGAAGCGAAA AGGTTATCAG ATTTATCGAC CACTTTTAGC 300  
 TGTCTCTAAA AAAGAAATAr AACAAATCCA AGAGAGATAT CATATTCCAT ATTTTGAAGA 360  
 30 TGAATCnAAT AAAGATAACA AATATGTTAG AAATGATATT CGTAAnAGAA TTATTCCAGC 420  
 TATTGATGAA AATAATCAAC TTAAAGTATC GCATTTATTA A 461

(2) INFORMATION FOR SEQ ID NO: 1443:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 143 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1443:

45 AAAGGTGATA AAAACAAAG GCATTGTAAA TTAAGTAAA ACCAAGTGAG TTATTACACG 60  
 ATTCTAATTG GGATAATGCG CGATATTTTA TTCCACACTT GTTACATTAT TGCTTTACGT 120  
 50 GGGGGTTAGC GTGGAnTCAT CAC 143

(2) INFORMATION FOR SEQ ID NO: 1444:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 90 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1444:

10

TGGTGTGGT TCATCAGTTG TAAACGCGAT TGTCAACAAGA CTTAGAAGTA TATGTACACA 60  
GAAATGAGAC TATATATCAT CAAGCATATA 90

(2) INFORMATION FOR SEQ ID NO: 1445:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 218 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1445:

25

ATTGAACAGT GACAACAAAT GACAACAATG AATGACCAAC TGAGTTGCAG AATTGACCGA 60  
CCTGACTTGC TGTAAGATGT GCATTGCCTG TGACCAGTTA ACTGCTGTTT GTACATTATG 120  
ATTGTGCACG TGAAGTCTTT GCAAATGACT TTTAACATTA TGCTGCTAGA GCCATCTTTT 180  
AAAGATGTTT GGACTAACGT nCATGATGTG AATATCTG 218

30

(2) INFORMATION FOR SEQ ID NO: 1446:

35

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1446:

TTTGACTTGA CATTATAGAA CACAAATTCA TTTGAAACTA TGTTTTCAAA TTTATTTATT 60  
GTTACTGGGA ATTTACATT ATTAGATTTA TTTATTTTCT TTTGA 105

45

(2) INFORMATION FOR SEQ ID NO: 1447:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1447:

AGACTGAAAA CTGCATATGC AGAGGCGATG AAACAAAATG CCAT

104

## (2) INFORMATION FOR SEQ ID NO: 1448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1448:

TTGAATTAAC TGAAGAAATA GCAGTGCAAG CAGGATTGTT GATATGACAA CATTGAGTC 60  
AGAATGGCAA CAACAACGTG ATTCGTGCAC TCCAAGCACG TGCA 104

## (2) INFORMATION FOR SEQ ID NO: 1449:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1449:

TATTAATTTT TTTTAATATG GAATATTCAT TGCATCGCTT TCCTATTCTT CAAGCCCCACT 60  
TTTTATCTTC ATATACATTA ATTAACCACC KTCAAACATT GTCGTTAGAT TCGCCAAATT 120  
GAATCTATTT TTAGCACAGC AAAAAACCGA ACTGCTGAAA TAATGCATCT CCAACAGTCC 180  
GGTCTATTAA ACTATTTACT TATCTTTATT AAACAATTGA CATGATTTAT TAGAATAACC 240  
CAATTGGCAT GACCATGCAT CAGTAACATC CATGTTTAAAT GGCTGCTGGT TTTTATAGTA 300  
AACCAGGCCA GAGTCATGGn TGGCACCTGn GCAACGCnAC GATAAAGCC 349

## (2) INFORMATION FOR SEQ ID NO: 1450:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1450:

GATTTTATAT AAATATAGCT TTTCAACAAA ACAAATGATT GAATTTCTAG GAATTGAGTC 60  
ATTAAAAAAA CACTTGAAAA ATTCAAGGTG GATTGCGCTA TTGCCGGAAT TTATTGTTGC 120



AGAAACAACA TTGaTAATTA ATCCTGAATC GAATAAGCAm GTACTTGAAT CTTTTGTAAA 240  
 AGATGTTTTT TTATAATTAT TGGTGAAAAC GTGTAGTTAT GGTGAAACTC AAAGATAATA 300  
 5 ATTTAAATGA GATGTTAATG AAAAAGTAAT TCAATATAnA ACAGGTGATT TAnATCTTAA 360  
 TAAGGnTAAT TCCAGGTTGA ATTCCAATTG CGGGCATCAT 400

## (2) INFORMATION FOR SEQ ID NO: 1451:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1451:

20 TCGGTTATAG TTGCTATTCT CAATTATGTT CGCGATAATT TTAAGTAAAA GTAAGCACAG 60  
 ATATTGAATT TGATAGGAGT TAATTGATAT ATACATACGA ACTTTCATGG ATCACTTAAA 120  
 TTnG 124

## (2) INFORMATION FOR SEQ ID NO: 1452:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1452:

35 TGTATTAAAA ACCTTCCACC TTAAAAAGCA ACAATGCGGT GTCCTTTAAA TTCAAACATA 60  
 ACCATATACG AATTACTCGA TAATTCTGTG TGTTTAATTG ACAGATGTCG TGTGAATTGA 120  
 40 TnATTT 126

## (2) INFORMATION FOR SEQ ID NO: 1453:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 280 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1453:

50 ACTTTGGCAA CATCTGGAAT ATCATATAAA TCAAGTAACT TACCTAACCG ATGATTAATA 60

CTAACAGTTG TTTCCATGCC TACACCTCAC GATATTATCA CTATTCATAT TAACATTATA 180  
 TGTAAGAAAT TAAAATCTTT TGAAGCATTA AGATTACTTA TCATTThTAA ATTTCAATTT 240  
 5 AACTAACAG TAATTTATGT AGCTTTTGnA ATTCTCATAA 280

(2) INFORMATION FOR SEQ ID NO: 1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1454:

ATATTCTTTA AATTAACTG ATCACTTGAA TAATTAACAT TACTTAATTC TATGGCATTTC 60  
 20 ATGATGATTG CTCCTCATAA ATGAACGTTA AAATATCCTG CAGTTCCTCA AGTGACATTT 120  
 CGATGGCTTG CGCTTCATTA ACCAATTCTT TAACCAAATT TTCAATGGTA AAAAATTGTT 180  
 TCTCTTTTAA AATAGGAACT ATTCTThGCT CCTTAACAAA GGnCCCTTTT CCTCTAATTG 240  
 25 TT 242

(2) INFORMATION FOR SEQ ID NO: 1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1455:

ATAAAATTGC AGACTTAGAT TACTCTTGTT CAGCATTTTT AATGTATATC GGTATAGATA 60  
 40 TTGATGTGAC AGATCAAGTG AGACTTGCAT AntGGTATTT TATTCAGATG 110

(2) INFORMATION FOR SEQ ID NO: 1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1456:

ACCAGTGGTT GCCTTTTTTAA GTCCCGCGTG GGACAAAAAT TAACCTCTTT ACACTTGCAA 60

AAAGCGCTTG CAATATATTT TCGATTTGTT ATTCAACmAA ACGTTTTATT tTATTCGCTG 180  
 TAGTCAAATG TATACCCCTA TACTGACTCG aTAATCATTT GCTTATnATT TGAGAcTAGG 240  
 5 ACATAAAATcA ATGCTCTAGA ATCCAAAAAG TCACATTAGT AGTAGTTAAC CGAACGAAAA 300  
 TGCACCTTGTA ACAAGCTTTT TTCAATTAAA GTCAGGGGCC CCAACATAGA GAATTTTCGAA 360  
 ATGAAATTCT ACAGGCAATG CGAGTTGGGG TGGGACGACG AAATAAATTT TGCAAAAATA 420  
 10 TCATTTCTGT CCCACCTCAC TCAAAATAAA TTTCATATC CGTAAAATAA ACAACTAACT 480  
 ATTTAAGTAT CATCTCTCCC CTAATTAACA ATTATAAAAA TAAGAACCAA TATTCGAGAC 540  
 15 AACCTAATTA A 551

## (2) INFORMATION FOR SEQ ID NO: 1457:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1457:

ATCnGGGGCT GCATAAGCGA TATCAAGTGT GAGCATTGAA CGATTCAGGA CTGACCAGCA 60  
 30 CGCCGTTTGC CTGCTTTGAA AGATCCACCG ACAAATCCGC CAACATCGT 109

## (2) INFORMATION FOR SEQ ID NO: 1458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1458:

ACCAGAGCCT CTTTGACTTC CTAAGTCGAA TAGCATCGTT GATATAGTTA AAGATGACGC 60  
 45 TAGATTTAGn AATCCAAACT CATAACACCT CCACCATTCC ATCACATCTG GA 112

## (2) INFORMATION FOR SEQ ID NO: 1459:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CCCCAACCAA TTTTAAAAA AAGGGGGCCT TTGGGGGGGC CAACCAAGGG GGAACCCCTT 60  
 AACCCCAATT TTGGCCAATT TAAAGGGAA GGCCTTGAA CCTTTTGGG AATGGGCCGG 120  
 5 TTTTAAACCC TTGGTTTCCG GAAGGGGAAA ATTTTAAAA AAACCGGAAT TGGTTGGCCC 180  
 CCTTTAAATT AAAAAGTTCC CTAaaaaaA AATTCCCCCA AGGG 224

(2) INFORMATION FOR SEQ ID NO: 1460:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1460:

20 TTTCGACAAT CAATTCGACG TCAGTGCCAC TCCATCTATA GTAAAGCGTT GATACTTTCA 60  
 ATAATACTG GATCACTGTC TAATTATAAA TGGATTCTTA CATCCACCA TAATAAATTn 120  
 CATATGTTCA TCACC 135

25 (2) INFORMATION FOR SEQ ID NO: 1461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1461:

TTATAGAACC TCGTACTCCT nTCGACACTT GAATTTAAAT CAGAGCCGCC AGTGGAGAAG 60  
 CATGAATTGA CTGGTACCAC TCGCAGAAAG TAATGATTCT AAGCCACTTG ATTA 114

40 (2) INFORMATION FOR SEQ ID NO: 1462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1462:

GTTGAATTGT TGGTGATGTG GTTACACGAA TTTCGAATAA TTGTTCTTTA CGTCAAAACG 60  
 TATCGTTCCA AAGTAATCCC CnGGTAATAG TTACCAACAA GTTCA 105

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 162 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1463:

TTGTATGACT CTTCGGACTT TGGTAAAATT GTGAACGCTG GntGAATGAT TTTTGTTTGA 60  
CAATTGGCCT TATCATCATT AATCGTATTT TTAAGCTGCT CGGATATAAG TTCTCAGCGA 120  
GTTCTTTTTG ATGTATCATT AGTGTAGAAA ATAGCTGTTT GT 162

(2) INFORMATION FOR SEQ ID NO: 1464:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1464:

TAAATTGGAA AGTCACATTC AAnATGCGAA AATGTTTTAA AATGTCCTGT AGGTGCTTAA 60  
TAGTTTTGCA TTTGCAAATT TTA CTGAACC GGTTTAAACG AAT 103

(2) INFORMATION FOR SEQ ID NO: 1465:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 153 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1465:

AAATTGTATA ACTACCAAGC TTATATGAAA TGGTAAACAA AATATTATCA CTTGTTTGAT 60  
AAGTAGCGTG GAAAATATTG TATCTTTCTA AATGTACACG TTAGAAnTCA TGCTTATGTA 120  
TTACACGCGG GGCACTGGTA CCTAAGGGCC TAT 153

(2) INFORMATION FOR SEQ ID NO: 1466:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 124 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1466:

TTTCAGTAAC ATATGAAAAC TTAATTAACG ATGTTTCAGTA GGTTCATACA TTTTACTTTA 60  
 5 TGATGCTTAA TTGAATTACA nTTAAGATAT GACCAGCTAA AAAGAGTTAA TGTGATATTT 120  
 AACC 124

## (2) INFORMATION FOR SEQ ID NO: 1467:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1467:

AAGGAATTAA GTTTGCGACA CCAGCAAATA GTACTAATAA AGGAATATAT GGTAAGTCAA 60  
 TAATTGAATA ACCGATATAT AAGAATATAC CTAAAATAAC ACTGACAGTT ACTTGACCTT 120  
 GAATGTAAGA TTTTAATGTA AAGTTTAAAT CAGTTAATAA ATCTACGAAA AATACTTTAC 180  
 25 GTTCACCTTT GAnAAATTTA GCAACAGCTG GGATAAATTT TTCATGGTCT TTTAACATAT 240  
 AAATTAAGAA GAATGGAACC ATAATCAATA AGAAGATGGT TGAAATTAAT GATGTAATGT 300  
 ACTGTAATGA ATTAGATAAn ATATTAGnAA CGCCATCACC CATTGATTTA ACCA 354

## (2) INFORMATION FOR SEQ ID NO: 1468:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1468:

TGCAAACCTAG GAACAATAAT GTTAATATAA CTATGATGnA AGTTAAAAAA TAAAAAGGAA 60  
 CACTCTATAA TATGAATTAG GGTTTACAGT TTTTGTAGTA TTTTACAGTA TCAAAGTTTA 120

## (2) INFORMATION FOR SEQ ID NO: 1469:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TCTAAATGCT GACTAAAAC AGCAACACGA GACTCATTAT TATTAGACAC GATTGTAATA 60  
 GTGATTCCTT TTTCATTAGC TTCCTTAAAC CATGCTTTAA CACGTTCTGT AGGTTCTTTA 120  
 5 ACATCCCAAC CTACTAGCGT ATTATCTAAA TCTGTAATAA TACCTTTAAC GCCTTTGTCC 180  
 ACTAACTTGT CTAAATCAAT TTGAAATATT GATTGAACAT ATGAATTCGG CATAAAAAAC 240  
 10 TTGCGAACTA AACCCATTTA ACTCACCTTT ACCTTTTAT AATTGAGACA CTAATGCTTC 300  
 AACAGTTTGA CTTGATGATA CAGCTGCTTT TTCTAAAAAT GCTTCGAAGC TCATTTCCGC 360  
 TTCTCCATTG GCTAAGTCTG AACTGCACG AACTACAACA AATGGTACAT TAAATTGATA 420  
 15 ACATGTTTGT GCAATTGCAG TTGCTTCCAT TTCAACCGCC ATCGCATTTG GAAATG 476

## (2) INFORMATION FOR SEQ ID NO: 1470:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1470:

CACCATACAT GGGTAAGGAT ACTACTCAA TCAACTTGAA ACCAATAATH CATGACCATA 60  
 TGTGTGCCAA TGAATTCAAT TGGAAGACA ATGATGAGAT ACTATTAAAA CGATTATATT 120  
 30 TATTGTCACT TGTTCAAACG CACTCCTTTT CCAAAT 156

## (2) INFORMATION FOR SEQ ID NO: 1471:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1471:

AACAAAAGTT TTGAAAAGCC GGGTGCCAGC GAAAACCTAA AAAGCACTTT ATCAGAAAAA 60  
 45 GCTAAGAAAA AAGATTAATA TTCATTCATT AAATATAAAT CCAATTTAAT TTGTTGTTTA 120  
 AGGTCTACAA GTGTATGTTT AATATACAAT TCATCGTTTG ACGGTAAATC AGATACTTTG 180  
 AAATCTTGTC GCTCAACCTC TAGTAAATCG AAATCGCTAC CAGCTGAATT ATAGGTTTTA 240  
 50 AGTTCACCCT CTTCAATGAT TCTGTTTTCA AAGTCTTTAA TAACTATAAA TACTGGTTTA 300  
 CCGTTGTTAT TAAACAACCT GTCTCTTTTG TCTAATAAGC TTATACAATC CAAATTCATA 360

## (2) INFORMATION FOR SEQ ID NO: 1472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1472:

CTAGGATTnC ATCTATTTGG GATGAAAATA AGCGTTTCCT GAATCCACAA GAATATCCAG 60  
TCGATTTAAG CCAGGCATGT TGGGGTAATA ACATAACGTT TTTTGA 106

## (2) INFORMATION FOR SEQ ID NO: 1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1473:

TATCTTACCT ACATTGTTAT CTGATGGCTG TAATCATTAAT ATCTATAACA CCGAGTTCTT 60  
CCATTAAATTT TCAGCTTCAT TCGACTGCCT TTTTATnTTT CGTACTATTA CGAATTT 117

## (2) INFORMATION FOR SEQ ID NO: 1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1474:

ATGCATGGCA CTGGAAnCAG CTGGGAGATA TAGGTAGTAT CCTAAAGAAG TTCAGTTAAT 60  
CGGAGCGATT GTATTGCATG AAGGTAACAT TCGCGAGTGC CAACAGGCCGA AGTAAAACTT 120  
AACGGCAACC ATGCCTTATA TTAAATGCCC TTCCGGGAAA GGAC 164

## (2) INFORMATION FOR SEQ ID NO: 1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1475:

ACAGCAAGAC GTGACAAATC AGATACTATT AGTCATCAGC GTTAACATGT GGATAnGTGT 60  
 5 GAGGTACGAA TAnCCGAAAG GAAATACGAC CTTTAACATT CGCGCACAAA ATGAGCTCAG 120  
 GCGCCTGCCT TGCCCATTTT TTAAATTATT TCCCTGGAAA TGATTGCTG TGTGCTGTTC 180  
 10 TGTCCACAAC AACACGATTA ATGCCATGAC 210

## (2) INFORMATION FOR SEQ ID NO: 1476:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1476:

AGGGTGATTT CACGGTTCGT CTGCCATTT AATTGCGCAT TTTGCACACC ATCTACCGTT 60  
 TGCAATTTTG GTATTAATTG TTGCATGCAG TACTGTCCGT TGACTTTGnT GCAAGTGCAT 120  
 25 GCTCTTTC 128

## (2) INFORMATION FOR SEQ ID NO: 1477:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1477:

AAAATCTGGT AAAGTAACTA GAGTTTAATA AATATATTGC ACATAAAAAA TGTGACCTTA 60  
 40 TGTGGAGGAC ACATTTACTT AAGAACTAAG AGCTCAACCT CTTAGTTCTT TTTTGTAC 120  
 CAAACAATAC ATAATGGTTC ATAGTGAAAT TCGAACTATC AATATAATTT GGTAAATACG 180  
 TTTAATAATG GTTCTCTGTC AAATTGGACT TATGGGTTCA ATATCGATTT TGGCACATAA 240  
 45 ATCAATGTAC TAGGACCTAC AATTTTCCTT TCAATAATAA ATCACGCCAT AATCTTCATT 300  
 AATTACAGCG TGATTCATCT ATTATTATGT TATAAATkCT ATCTATAAAC GTCACCTTTAT 360  
 50 TAAATAACTC ATGCACTTTA TTAAAAATCC TCACAAATTT GAATATACTT AATTTAAATC 420  
 TGTACTTCTA ATTTGCAAAA TCAACCCATC ATGTACAGTT ACTTTCGCTT GCAAAGACTC 480  
 AATTTCATTT GAAATAGTTA AAGTAGAACC TATATnaAGC ATTTGTCTAG CTAAATTATA 540

GATAACTCTT ATCTTTTTCa ACTGTAGGTG ACCTTTAGGG C

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(2) INFORMATION FOR SEQ ID NO: 1478:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1478:

TTAACCGTGA TGCAGAGTAG TAAGTGGATn CATGCTCTGT TATGGATGAC AAGACAAAGC 60  
 AGCGAATATT GCGTACTGCG ATTGATGAGC AGATGCATAT GATTGGATTG GTGCAGCTGT 120  
 C 121

(2) INFORMATION FOR SEQ ID NO: 1479:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1479:

ACCATTGCTT AGATAAATAC CTCGCAGTGA ACCGCATTAG TATAGCACTT CTAGCTGATC 60  
 GCATCAGTAA AGTATGCTAT TAATGTCTCA GTTTTATCTG TAATGCATGT TTAAGTTAGT 120  
 CATAGCATTa TTh 133

(2) INFORMATION FOR SEQ ID NO: 1480:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1480:

TTTTGGGGnT TTAAATTTT AAATTCCCGn TGGGGGAAAT TCCCTTAAAA ATTCCCAACC 60  
 CTTTTAAGGG GTGGGGGTTT TTTTAGGGAA AAAGGGGCCC GGGGTTAATG GTTCCCAAAA 120  
 AATTGGGGAA AATGGCCCCC CAAATTTTAA ATTCCCGGTT TAAAATTGG GGTGGGTAA 180  
 ATTGGAAAAA CCCCCAAATT T 201

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 112 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1481:

CAGTATCAAG CATAGTAAAA AATGAGGGTA GGA CTGAAAA TACGGCGTTA TTGGTGGTGC 60  
ATTACGGTA AATATGTTGC ATGACCAGCA AGTTTTGGnC TTCTGATGCA CC 112

(2) INFORMATION FOR SEQ ID NO: 1482:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1482:

CAAAAAACAA GTTCTGATAT GCAGTAGCTG AATAATTTTG CTAGTTACAC CAAGTGATC 60  
TTCTGGTGTT TTA CTTTTTA TAAATGTTTT CATATATTTT ATATGTATAA AAATGGGATT 120  
TAGCGTA 127

(2) INFORMATION FOR SEQ ID NO: 1483:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 83 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1483:

AGTGGTGTAT TGGGTGAGTA ATGCTTAACT TCATACCTGG TGCATTGGCT GTTCAGTATC 60  
ATTATATCTG CATGGGCGAT ACT 83

(2) INFORMATION FOR SEQ ID NO: 1484:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 201 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

TATTATTGAT GTTCTTTGGT TCATTCTTTG GTAATAATTT TGCACCTGAA AATTTACAAC 60  
 CGTTAGCTGG AACCTAGnCA AAGGGATGGG TTTAGTGGTC TATTGTGGGT TTATTGGTAT 120  
 5 TCCGTGGGCC ACCCCATGGG GCCATTATGG TTTGGGAATT TTGGGAATAA ATTAATTTnC 180  
 CCAACCAAAA ACCAGGCCAA G 201

## (2) INFORMATION FOR SEQ ID NO: 1485:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1485:

CTCACAGCAA CATCAAAGAG GCAGATATTA GTCAAGTTCA ACGTAATAAC ATCTACCTTC 60  
 ACAAGTCGAT AAAGGAGCAC CATCATTAAT AAGTAGATCA ACAAGTCAAC GAGAATTTTA 120  
 ATGTGCAGAA TAGAGAAGTA CACCACACAn ATAATCAAGC GATGTAATTA CTACTACATT 180  
 25 TTnCATGACA GAGTGAACCT CAACAGCGGT 210

## (2) INFORMATION FOR SEQ ID NO: 1486:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1486:

CAGGTTATGT TTGCATTAGA AGTTCTTGGA AAATCTTTAT GGAACGTGGT TTACACCCTG 60  
 ACTTTGAATT GCATCGATCT GATGAAGATA AATGAAATTG AATGGGATGG CChACATGGA 120  
 ATGCAACCTA TGACTTGGAT GGAATTAGAT GAAGCGGG 158

## (2) INFORMATION FOR SEQ ID NO: 1487:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1487:

TTGCAGCATA TAGAGGTAGA GGCATCGCGA CAAAGTTATT AACGTCATTA CTTG

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(2) INFORMATION FOR SEQ ID NO: 1488:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1488:

TGCTAAGTGA TAAAAAGAAT GATAAGCCAG GTGTACCAAT GGGTCCTGGA TTAGACCATT 60  
 TGGGAGATAT CGTTGTACCA CATGTTGATC AACTAACGTT nCCACATG 108

(2) INFORMATION FOR SEQ ID NO: 1489:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1489:

CAAnACGTAA TTTTCATGATG AAAGTGGTCG ATAATTTCTT GAAACATCGC TTTCAGTAAT 60  
 AACGCCTGCT TTAAGGTCAC GTTCCGCATA GGTGTACTGA GGATGTTGAT GT 112

(2) INFORMATION FOR SEQ ID NO: 1490:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1490:

CAGAACGTTT AAAACAAAGT TGGAAAAGTT TTCTAATCGT ATTAGCTGCA TGTTTAATAC 60  
 TTATTATTGC AAGTGAAACG CTTATTTTCC TTTAGTCATT TGACCGATGT TAAAGAGGTG 120  
 AGATGGTTAT TTAGAATCAT TGTATTGATT GTTTTTGCGG TAGTGATGTT CACAATTTAT 180  
 ATCTCTTATC ATCATTATAT GAATGACTTT TTAGTTACTA AGTTATTTAA TATTTCCGCA 240  
 GCGACGCCAt AGTTATTATG TCTAT 265

(2) INFORMATION FOR SEQ ID NO: 1491:

- (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1491:

CnAAATTGGC CAGGGGCTCA TCCAATATTA AAATAGGCGT ACGAGGGATT AATAGACCAC 60  
 CTAATGAAAC GCGTTGGTTG TTGGACCTCC AGATAAATCC TGGGGGTCGG TGG 113

## (2) INFORMATION FOR SEQ ID NO: 1492:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1492:

ACTAAGAAAA TCCGAAATCT TTTCCGCTTC TTTTAAATAC GTAATACTTC CTTTTTTTCG 60  
 CTCTAAATGT TTGGCATTCA ACTCATAACT ATTCATTAGT TTCGTTAAGC CTTCTGCATG 120  
 ACTCTCATTT TGAGAAAAAA TTTCCAAATG GTACGAAGAT GTTTCAGGGT TATTCACTGA 180  
 GCCACCTGCC AGAAAAGCTC CTCTCAAGTA ACTGCGTCTC ATTTTCGTCAT CTTGAATCAT 240  
 TGAAATGATC AATTTTCATGG CGnnAAAATG CCGTCT 276

## (2) INFORMATION FOR SEQ ID NO: 1493:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1493:

GATGACGAGC GCCAATTATG TCACTTTTAT GGCAAAAGCT GGAAGTAAAC AACnAGCCT 60  
 GCCAGTAAAA TTGGCAATTG GGACGTTCTT AGCAGGTGCG TCATACATAC 110

## (2) INFORMATION FOR SEQ ID NO: 1494:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1494:

AAAAAAAGG TTTTACCC GGAATCCAA AnTTTAAATC CCTTAAAAA AATTCCGGCC 60  
 5 AACCCCCAAA CCAAGGTTT TTCTTAAC CTGGAAATA ACCAAGGTTT TTTTCCAAA 120  
 AAATTTTCCA AAAAAGGAAT TACCCAAACC CTAAAGGTT TAAAATTGG GGGGGGAAAA 180  
 10 AGGCCCTTTT AGGGGGGGAA 200

## (2) INFORMATION FOR SEQ ID NO: 1495:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1495:

AAAAAATTTG GTGCATTTAT CATATGGAGT ATTAATCTGT AGAAGTAAAG GCGATATAAA 60  
 TGTACTTTG GTAATAAAGA TTACAGCGAA CGTTATTATT GCTCAGGTCA GATCAAGAAA 120  
 25 TTGGTGTCCG GGTGACAAGA CTTGGTGGCG CGGTGTAGTT TGTCAGTTGT GTGGTCATCT 180  
 TAAATAACGC TATCGTACGG TGTGTATCAC ATGAAGGGAC TCTACTAAT TCTGCAAGTA 240  
 30 CACGTCACGC nnt 253

## (2) INFORMATION FOR SEQ ID NO: 1496:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1496:

ACGCTAGCTT CTGAAAAAAT AAGTGAAC TA TGGATGCAAT GAnCCTATTC CTGAATGATA 60  
 45 TTAGACGTAG CGCACCTGGT GCAGAACGCC AATAAAAAGA CAAG 104

## (2) INFORMATION FOR SEQ ID NO: 1497:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AGGGAGGCGC CCAAATGGCT CTATATTAAA AAAGGACTCT CAGAGCATT A TGAAAAGTT 60  
 GAAGCTCAAA AGGAAnCGAA AGAAACAAGT ATCAAAACAT 100

(2) INFORMATION FOR SEQ ID NO: 1498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1498:

TGGAAC TTG GGGAAGTCAA ACGGTTGTAA TCGTTGAACA TAAAGTTAAA CACATTCTGG 60  
 ATCATGTCTGA nCGCGTCCAT TTGATGGATA TAACGGGAAT A 101

(2) INFORMATION FOR SEQ ID NO: 1499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1499:

AGTTCTGGTG CATCGTTTTT CATGTATTT GTGACGATTA TCATTCCAGC ATTAGAATAT 60  
 TATGCATTAT ATTTAGGTGT GATAGGTGCA TTTATAGGTG GTTTAACTGT TTATACACTT 120  
 TCAGGTG 127

(2) INFORMATION FOR SEQ ID NO: 1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1500:

TCCCCGCTTT AATACCTTCC ACGATTTCTT TAATTGCTTG CGGTTGGTCA CCTTGAGGCT 60  
 CAAAATCAGA ATGTATTTTA AAAGGATAAT GTTCAACCAT TGTCACATAT GCCTCCTCTT 120  
 TCAACGTATT ATTTATATTT CCGCTCAACT CTTTGCTTTC TCATnACATA TnTTAGCAAA 180  
 GTAGTCACAC AAAAaGCAAA CGTTkGTTTC TAAAAATGTC GAACAAaGAA AnACAAACAT 240



AAATACACAT TATATTAATC ATCATTTTGT TTCAACAAAT TTGTTTGAAA CATTATTTTA 360  
 AAGTTAATCT TAGCGATCTT CATCTTGATG TTTATGAAAT TCGAGTTGAT CTATAATTAA 420  
 5 ATAACCAGCT AATAATGACA CTACATCAAT AAAAATAATC CACTCGTTAT GGAAATACTC 480  
 TTTATAGATT GAGGCACCAA TTAAAATTAA TGTCAGAATA GTACCGACCC ATTTACTTCT 540  
 10 TGTTATTACA CTAAATAATA 560

## (2) INFORMATION FOR SEQ ID NO: 1501:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1501:

ATTAAATCAT ACTnACAATT ACCGATGACA TTATTCCAAT TCAATCTAAT TCCGTGATGA 60  
 AAGAGCCACG TTTTG GTTAC TTCGTGGGCG TGAATTATTA TG 102

## (2) INFORMATION FOR SEQ ID NO: 1502:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1502:

TATGGTAGCT CCAAATGGTT GTATCGTCAC ACCATCATCT TCAAGTGCAA TGCGATGTAA 60  
 TCGATTGGCT GTTGTCTCTG TTACCCATAG TACTTTTTCA TCTGTACTTA AAGCAATACC 120  
 40 ATTTGCTACG CTAATATTTT GAATGATAGG CGTCACTGTT CTAAAGTCCG GCGAAACATA 180  
 ATAAACGCCT CCTAGTGGAT TGGTAGAGTA TCCTCTAAAA TCTGTAAAAT AAAATCCACC 240  
 TTTAGAATCA AATACCATGT CATCAATACA ATATGCTGTT GAAAGATCTT CAATAATATC 300  
 45 TTGTAAGTTG TCACCATTTT CTGTAGCTGC AAAAATGCCT CCnGGAGATT TAAAATCTCC 360  
 nAAAATAACC AACGnATAAA TCGGGCAnCT TATGGAATTG 400

## (2) INFORMATION FOR SEQ ID NO: 1503:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1503:

5 TACAGGTAGT TAACAGTTGA TGTTAAATGG CGTACTGGAT TCTTTACGCA CGATTTTTTG 60  
 TTAATAAGTA TGGGATAGCA CATTACTATA TCCTACTTAC GACTTATTGG ATATGTCnTA 120  
 GCTATTCTTA AGCTCGAAAA GTTTCACAGG ATACATAAGG GACCAACT 168

## (2) INFORMATION FOR SEQ ID NO: 1504:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 237 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1504:

20 CTACTGATTG TGTAATGTCG TTGGTAGGCT TGGGCTGTAC GCAGTATTAG GTGTAGGCAA 60  
 CTTGGCTTTT GGCATCTACC TTGTATGTGT CGTGTATCTA nGGCTGGGGC TTGCTCCTTC 120  
 25 AGTTGTTAGA CAGTAGGGGG TAATCTCAGG GGTGCAATGT ACTCCCTCCG TCCTAAAATA 180  
 CnTATATGC TCGTGCCGAA TTCCTGCAGC CCGGGGGATC CACTAGTTCT AGAGCGG 237

## (2) INFORMATION FOR SEQ ID NO: 1505:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1505:

40 CGCATTTACC ACCATATGAT GGATCCAnCG ACGTTTTAAT AAAGATAAAA GTGACAGTAG 60  
 CGGGAAAACA GGnCCATAAT TCACATCTCT TTTGAAAAAT ATGTTCAAGC TAGGATCATT 120  
 AGGAGAGTCA TATTAATAAT AAAAATGTTG CAATCAATCG ACGTGCGTTG AATCTTAAAT 180  
 45 ACATAATAAA TGTTGTAGAA GATATGGGT 209

## (2) INFORMATION FOR SEQ ID NO: 1506:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1506:

5 AAAATGTGGC TATTGATTTT GACTTGGAAC TTTTGAACA TTTCTCTCAA GGATTTAAAT 60  
 GTAGGTAACA GGGCAGGTAC TACGGTACTT ncCTATTTT TTATGCAAAT TTTAAAAAAC 120  
 A 121

## (2) INFORMATION FOR SEQ ID NO: 1507:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1507:

20 AATGACAAGG TCAGCATTAA AACCATTAA AAATAAACGC GTTATGGTTA CTGGACGTAT 60  
 ACAACGTGTT TTGTTTAAAA ATTATTTAGA TAGACATAGC ACATTTAAGC CGAATGTAAG 120  
 GATATTATTA AAAGAnGTAT TTGT 144

## (2) INFORMATION FOR SEQ ID NO: 1508:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1508:

35 CCGATTGAAT CTGTGTACAC TTCACCAAAG ATATCTTTCT TCGTTTCTTC AGATAAACTT 60  
 TCCATTGCTT TCTTATCAAC ACTTGTTTCT ACTAATAAGT GTGTAAATTT GTGCTTnTTA 120  
 40 ACAAACCTCAA TAGCTTGTC 139

## (2) INFORMATION FOR SEQ ID NO: 1509:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 155 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1509:

55 TCTGCCTGCC TCGGCCTCCC AAAGTGCTGG CATTACAGGC ATGAGCCACC ATGCCTGGCT 60

CAAGTTAAAA TACAGATGTA AGACTTGACT TGATC

155

(2) INFORMATION FOR SEQ ID NO: 1510:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1510:

ATCCCAATGC TAATGAATTT GCATATACGA TAAATAATGC TTTTATCAT CAATAAAGCT

60

ATGAATCTTT CAAGATCTTC ATTGAAC

87

(2) INFORMATION FOR SEQ ID NO: 1511:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1511:

ATAGGCGTTT ACCAGTTATT TTCGAATCCA TATAATTATG TTTGTCCGTT TGGTTTAATC

60

CAATTAATTG ATTAAGTTTT TCCAATTCCT TTTTTTTTAA TTAAAATTCC AATCCTTAAA

120

AAAAATTGGA AAAAAGCCTT AAAAAAATT GGTTAATTTT CCCAAGGGAA TTAAAAATTT

180

TGGGGTTTTT TnAGGnCCCT TTTGGGAAAA ACCCAAC

217

(2) INFORMATION FOR SEQ ID NO: 1512:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1512:

TGACATTGCA TCGGATTATG TTACATCANG GACAACGGGC CTCAAAAAGC GGTGCACAAA

60

CGTTCGTAA TCATATGCCA GTGCAATCGG ATGTAAAGAG A

101

(2) INFORMATION FOR SEQ ID NO: 1513:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1513:

GATTTTATTG AAATGATTTT ACCTGTGATC AATTATTGTA ACAAATCTAC AATAAAATTG 60

10 TCTTACTGCA TGACCTAATA AaATAGCAAC AGATATCATA CACACTTGTA ATTT 114

(2) INFORMATION FOR SEQ ID NO: 1514:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1514:

ACATATACAG GTACGTGTTT AGTCCGTCGT ATACTGCAAA ATTATGTCCG ATGAAATTAG 60

25 GGGAAAATTG TAGAACG 77

(2) INFORMATION FOR SEQ ID NO: 1515:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1515:

CCTTATAAAG TTAATGCAAG CAACATGGAC AAATTATTAn TTGAATAAAC TGCAAGAAAG 60

40 ACAACAATCA TTCTTCGGAA TGCTAGGAGA ATATATTTTA GA 102

(2) INFORMATION FOR SEQ ID NO: 1516:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1516:

CAATTTTAAA TAGGATTTTT AAGACCTTGG TTGGGTTTTG GTACAATTAA TGGGGACATG 60

ACTAGGTCTT GCCACGTTTA TATGCATCT 89

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1517:

GTAAGAGTGC ATAGTTTTTA AATGTTGCTT GTCTGGTnTC ATTTTGGCAC CATACAGTTC 60  
 GTACCTGGAT TAGGGAAATG CCAAATGTCC GCGTAGTGAT AT 102

(2) INFORMATION FOR SEQ ID NO: 1518:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1518:

GAGAACTCCT TACCACAATC AAAAGTAATT GATTTAAATA TATGAGAAGA TAAAATGAAA 60  
 AGGTGCAAGC AGTATTAAGA ATTTAGGTAG CAAGAAAACA AGAAGTGGTA CATACGATGC 120  
 TAACCTAAAA AGAATTGGAG ATTAAAATGA TTATTAACCT TGAAACACAA CAAATACATT 180  
 TTGATTTAGA ACATGAAATT CCCTATTTTC AAGCACCTGA GAAAAATAGG ATACGCTTAG 240  
 ATATTGATGT TCTCAATAAA AAGCnAATTT CTAATATTAT TAATGTTATA TTTAATAACC 300  
 AATCAAAGAC GAAATGTACA TTTTGTCTG AATACTTATA TCCTGTTAAA TTTAGAGAAA 360  
 AAACAAGAAT TGGTCGTTTT TTTAATATTA CTAAGTGGTA CGAAGAAATC CATTCTACCG 420  
 ATGAGAAGTA TGnATTGCA ACTATTAA 448

(2) INFORMATION FOR SEQ ID NO: 1519:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1519:

ATGGACGAAA GAAGATGTCA TTGCTTTTGA AAACCTAACA AATATTAAAG TAAATTTAAA 60  
 AGGTAGCGGT TTTGTGTCCC ACCAATCAAT TAGTAAGGGA CAAAACTTA CTGAAAAAGA 120

ATTCAAATTC AGATGGTnAA GAAGAAATCT GACAGTTAAA ACTGACAGGG ATAAGTCGGG 240  
 ACTnAACAGG AATGGGCTAC nTTTAAATTT AGGGATGGTA TTGGGCCACT ATTTGGTTTT 300  
 5 TGAC 304

## (2) INFORMATION FOR SEQ ID NO: 1520:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1520:

ATGACGTCGC ATGCACGCGT AcGTAAGCTT GGaTCCTCTA GAGCGGCCGC CCTTTTTTTTTT 60  
 20 TTTTTTTTTT TTTCTGTTGG CCTTTGATAA TTTTATTGGA TCAGTAACAA CTTTTTGTGT 120  
 TTCAACTAAG ATAGCTAAAA TTCTAACACT TATATGTAAA AATTACACTC CATTTTAGCA 180  
 CAAATGTTAA CAGAAATTAA CAGCACAGTG CCATGAAGAA ATGAnAAATA CACAGCTTTG 240  
 25 GTAGGGnAAT GGTCTTGGA ATAATGTAAT GCCAAGTnTC TGATCATTTA ACATATCACT 300  
 CACCTCCTTC TTCATCTGAT GT 322

## (2) INFORMATION FOR SEQ ID NO: 1521:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1521:

TAAATACAAA CCCTTTAAAC ATATTTACTA AGTCGTTCAA TTGTTGATTT GATAAnTGAT 60  
 40 GTGATGTGGT ATTTTGCATC GGTCTGCTT GATTCCAGAC ATGTC 105

## (2) INFORMATION FOR SEQ ID NO: 1522:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1522:

GATCGTATTT CCCAGATGTA AATTChGTGG ACAATTGGCG TCAAATAGCT TCTAGTGG 118

(2) INFORMATION FOR SEQ ID NO: 1523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1523:

ChGCATATAA TCCCGCGACA TGTCTTTTAC GGGTGCACTT GTAATATTAT TACCCCCCGT 60  
ATAACCCATG TATATCTATA CTTTACCACA TAAATAATT CCGGGACTAT TTGGCACATG 120  
TTTGGGTGA ATTTCTTTAG TGGCACACCA CCCCTGG 157

(2) INFORMATION FOR SEQ ID NO: 1524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 82 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1524:

ACTGAGGTAG GTTATGTAGG ACGAGATGTT GAAAGTATGG TTAGACATCT TGTTGATCCT 60  
TGAGTAAGAT TAGTCAAGGC CG 82

(2) INFORMATION FOR SEQ ID NO: 1525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1525:

GATACAAAAA AGAAGTTCAA TTTGAACTAT GAAGAAATTT ATATTTTAAA TCATATTTTA 60  
AGAAGTGAGT CTAACGnAAT CTCATCTAAA GAGATTGCTA AGTGCTCAGA GTTCAAACCT 120  
TACTATTTAA CTAAAGCTTT ACAAAGCTA AAAGATTTAA AATTGTTATC AAAGAAAAGA 180  
AGTTTACAAG ACGAAAGAAC AGTTATTGTT TATGTTACAG ATACACAAAA AGCAAATATT 240  
CAAAACTGA TTTCAGAATT AGAAGAATAC ATTAAAAATT AAATCAAGGT TAATTGCGTT 300



AAAATTAACT TAAAATTTAA ATATTGAAGA GCTTAATTAA

400

(2) INFORMATION FOR SEQ ID NO: 1526:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1526:

ACTGTCTAAT ATCACTCCC TTAAAGTGTT TTTCATATTT TTCTATTAAT GTTCATATTG 60  
 TAGGGTGTG AATGCATCTA AGCATTCNCAA GTTATTCTCC AAGTTCATCA ATTTCAAAT 120  
 GGAAC 125

(2) INFORMATION FOR SEQ ID NO: 1527:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1527:

CATGTTTATT TATGTTTCGG CTTTAATGTT GAAGAGTTTT ACAAGTTTA CCGATTGCAT 60  
 TTTATAATTT TAATGCATTA TTGGAGCATT GGCTATCATC TATTACTGCG nA 112

(2) INFORMATION FOR SEQ ID NO: 1528:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1528:

GCGAAGATGA GGATGAGATG ACTAAAGGAA AATATTGAAA AACCAACCAA AAAGTATGA 60  
 ACATTATTAA AAATTTACAA AATCAAATCG ACAACTTGAG CGCAAGAACH AACAG 115

(2) INFORMATION FOR SEQ ID NO: 1529:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1529:

5 ATGGATCTTC CGCTTCTCTT AATTGATCAA TTAAATCAGA CATTTTCATGT TTTTGTAAT 60  
 AATGATTTCG TTTAATGGAT TTTTACATG ACATCATGAT TGCTACATCT TCACGTAATT 120  
 TTTTGATATC TACTTTTTTC TCTTCCAAA TTAGCTCAAT CATATCTTTA ATAATTTCTT 180  
 10 CTACTTCATC TTTAGGGAAC CAAACTGGAT AGCTACTTAC AATATAATCA TGACCACCAA 240  
 AATGTTCTAA CATGATACCT ACTTGTGAA GCTCATTTTT ATATTGATCA ATGACTAATT 300  
 15 GTTCATCTTT TGAAAAATGA AATGTAAACG GGATTAATAA ATCTTGTAAT TCATTGGTAA 360  
 CCTCACCTAT TTnATCTCGA AAATATTCAT ATnTTATnCT 400

(2) INFORMATION FOR SEQ ID NO: 1530:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 97 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1530:

TAACAGTCAA CCCACCCATT AATATATATT CAACGGCTGA CTGATACGAC GAACGTCAA 60  
 30 GAATATGAGA GGAATAGGGA CAAGATCATC ACACATA 97

(2) INFORMATION FOR SEQ ID NO: 1531:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1531:

TCATAACGGT GCAACTTAGA GCTGACGTAT AGTTCATTCC AACTATATAC GATGTATCAA 60  
 45 CACCATGTTT CAGTTTTAGG TTAACGATAC TGTATACCGT ATTATGTCAG nGGCACCTTA 120  
 TCTTCACGTA CTTTACGGCG AGATGATGAC 150

(2) INFORMATION FOR SEQ ID NO: 1532:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1532:

5 ATTCATTCTG CTAACAGTA AGGCAACCCC GCCAGCCTAG CCGGGTCCTC AACGACAGGA 60  
 GCACGATCAT GCGCACCCGT GGCCAGGACC CAACGCTGCC CGrCCTATCC TGAAGCCAAA 120  
 GGAAATGAGA TCGGAATT 138

## (2) INFORMATION FOR SEQ ID NO: 1533:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 460 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1533:

20 GGGGnCCnGG CAATGGAGGC GTGCTTGGAT GGTGCTTGGA ATCATCCCTT TGGCCTCGAT 60  
 CATAAGCTTA AACTTTTGGT GCTGGnGCCA CTGGAGGGAA ATCTTCAATT CTGGCAAATG 120  
 25 GTAATTnCTT ATACCAACAT TTAAGGCATG TGGTAATGCT GGCTACTCCC GCTTCGTTAT 180  
 CAGCTACATG ACAAATACAG ATGCCATCAC CTTTGCGTCC ATTTTAATCG TTGATGCTTG 240  
 GAAATGTTTT TTGTAAATAT CAATGTTATC CTTGCTGTGA TGTATCGCAT TTATATCTGG 300  
 30 TAGCAAAAAT GTTCCAACAG AAAGCCCTAT ACCTAGTTTCG GCAGCTATTT TGGCAGATGT 360  
 TGGCTACTA CTTAATAACC ACATTTCTGG AAAATGATCA TGTGTGGTGC ACTACGATCG 420  
 35 ACTTGTTTAT CTTTATTGTT AGATAATACG GAATACGnAA 460

## (2) INFORMATION FOR SEQ ID NO: 1534:

## (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1534:

45 TACGCTAATA AATAGTTCAC TTTTCCATTT TGTGTAGTCA GTCATTGTA TTCTTCAATT 60  
 TGCTCTTCAT TTAATGCCGC ATAAGCTTGA TCAATAATAT TTGGATTAAAG TTGTCCAATA 120  
 50 TACTCTAACT GGTCAATGATA AACAn 145

## (2) INFORMATION FOR SEQ ID NO: 1535:

55

(A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1535:

ACGCGATTTA ATCGTTCGTT CCAACGATGT CCACTCCCCT ACTAATAATT AAAATCATTAA 60  
 CAAATTATTT CAAACTTTAC AATTnAAACT AACAGTTTTTC TCAATAAAAT GCAAGCTTTT 120  
 CTCATTTGTT ATTTAGAATG ATTATGATTT A 151

## (2) INFORMATION FOR SEQ ID NO: 1536:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 86 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1536:

ATAATAGAAT CATTACAAAT TATTTAGAC TTTACAATTA AGACTAACAG TTTTCTCAAT 60  
 AAAATGCAAG CTTTTCTCAT TGTTAA 86

## (2) INFORMATION FOR SEQ ID NO: 1537:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1537:

ACCAAATGT AAAGCCATAT ACTGAACATA TTGATAGCAT ACTCAATGAG ATCAAATTAC 60  
 ATCGTGAATT TATTATAGAA GTACCTTATA TGAATTCAAG GAAATTTGAG CTAAGTATTG 120  
 CTAACATTGA ACAACTTTCT GTCGAATGTC ATTTTAAGCG AACAAGTCGA AAGTTATTTA 180  
 TAGAAAAGCT TAAAAGTGTT CAATATGATT TACAAAATAT ATTAGATGGC GTAACACnAG 240  
 AGGGTACTGA TGGTTAAAAC AGTTTATGTA ACAGGTTACA AATCATTCGA ATTAAACATT 300  
 TTTaAAGATG ACGCACCTGA AGTACATTAT TTAaACAAT TTATAaACA TAAAATTGAA 360  
 CAACTGTnGG ATGAAGGATT AGAATGGGnG TTAATACAAG 400

## (2) INFORMATION FOR SEQ ID NO: 1538:

(A) LENGTH: 136 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1538:

ATATCGTTAC TGCTGTATGT TTCAATATCT ATATTCATAA ATTTCAAATn CTGACACCTC 60  
AATTTCTTTA AAATAAGGGG CAGAACCCAC TATGACTATA GGATCTCTCA CAGGTCAATT 120  
CGCAAATCAC TCGTGC 136

(2) INFORMATION FOR SEQ ID NO: 1539:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1539:

TAAATATCTC GGCACAATGA TCGGGGATAT TTTTTTACAA TAGGCATAAA GGCTGGAAAA 60  
AACATATCTA GTGCTATGAT ACTTA 85

(2) INFORMATION FOR SEQ ID NO: 1540:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1540:

ACAATTTGTT TATTTCAACA AATTATCTTT ATTCCACGAT GTGCACAAGT GGTGAAATC 60  
AGCTGAAGAC ACG 73

(2) INFORMATION FOR SEQ ID NO: 1541:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1541:

TGCAGGAATT CGATATCAAG CTTATCGATA CCGTCGACCT CGAGGn

106

## (2) INFORMATION FOR SEQ ID NO: 1542:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1542:

ACATCAACTC ACCCATAATA TATATTCACG GCTGACTGAT ACGACGAACG TCAAAGAATA 60

TGAGAGGAAT AGGGACAAGA TCATCAC 87

## (2) INFORMATION FOR SEQ ID NO: 1543:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1543:

GCTTATTC TG AAAAATATTT AAATTGAAGA AAAGAATATT CTAAC TACGG AAGTGGTATT 60

AACTAATAAC TAGTATCCTT TATAAATAAA CATAAAAATA TTCAAACGAA GGTCTACTAA 120

ATAACTATCC ATAAAGTGAG TATAAGTTTG TTTGTAAAAC TGAAGTAAAA AGCATAAGGA 180

ATTACACTTT AAATACATAT AGTACTTACG AATAGAAAAT AATCCCTTCA ACAGTAATTT 240

TTAAACAAAA ATAAGTGTTG TTTTATGTTG ACTCTACTAG AATAACTTGA TATTATATAA 300

AAGTCGTCAA ACGGCACTAA TATTTAnnAA ACAAATGTTT TAAGTTGTTG GATTnAAAA 360

TATTGAATT AAGTGTAAT TTGGACTATT GGAAATTGCG 400

## (2) INFORMATION FOR SEQ ID NO: 1544:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1544:

ATAACGCTAA TCAGCCACAT TCAGTATTGT TAAATGGACA CACAAGCAGT TGATGAAAAT 60

## (2) INFORMATION FOR SEQ ID NO: 1545:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1545:

GGCTGTTATT GTTGTGGAGT TAAAAATGAA GGAAATTAT AACATGGTA AGCGTGTTC 60  
 TCGTATTACT TTAATTAAAC AACGGTATA ACCATACCTA ACTTAGTA 108

## (2) INFORMATION FOR SEQ ID NO: 1546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1546:

AAATATGTTT CATATATTAT GAATCTAGCC TTAATCATAT TGCATTCAAA ATAATTTTAA 60  
 AAAATGAAAA GAAAGGATTT AGCATGCAAA AATTCAAAGA CTTTTTTTAC GATGATTTAT 120  
 CGGTACACG AGGAAATTAT TTTTAACTT TAATGGCAGC ATTTTTTATT ACTATCATTT 180  
 TATTTATCGG CATAGTTGTC AGTGAAGTAC ATTTACTTTA TAGCATGCTA ATTGTATTAG 240  
 TAGGTTTAAT TCTATTGAGG CTATTCAAAA TCAATTTATT CTCTTTTAAA AAATTAACAT 300  
 TGTCTCAAGT TATTTATATT ATAGGCGGTG CACTATTAAT TTATGGGTTA GATAATCTTT 360  
 ATTTATATTT TCATGACGTA CCGGCAATGA ACAACAATTA GAGCAAGCAA TACGGAAATA 420  
 CACCATCTA TATTTCTATT TtCACTGTaC CATCATCCCC GCTATTGTGG aAGAAaTTGT 480  
 TTTtCGCGGT ATGATAATAA GGGkTATCTT CAGAAACAC TTGTTTTTtag GGTTAATTGT 540  
 GTCTAGTTTA GTTT 554

## (2) INFORMATION FOR SEQ ID NO: 1547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TAAAGCAACA CTTTAAATCC CTTTGAAGT TAGTTTATCC GCTAAATCAT AAGCTTCTTT 60  
 TTTGCTACTT ACAAAAATCA ATCCTTGTA AATTTACCT GAATATCCAT AGTAATCTGT 120  
 5 CTTTGAATA ATATAATTAA CTCTTTCATC AGAAGTTAAA TATCTCAGTT TAGTTACATC 180  
 ATCTTCTTTA ATACCTTGAT GTACATAATC AGTCACACCA AAATAATGAA ATGGGACATA 240  
 AAATATCACT TTCTAATGCT GCTTGTAACC TTATTTTATA TGCAATATTA TAATCAAACA 300  
 10 GTTCAAATAT ACTTAATTCA TCTGGATCTT TCTGGTGGTA GGCAGGTCAT TCCCAGCAnG 360  
 AACTTAGGGT TTGGAGGTAG GTTAAAATAC TCGGTTGGAT 400

(2) INFORMATION FOR SEQ ID NO: 1548:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 20 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1548:

25 CGCTCTAGAA CTAGTGGATC CCCCgggCTG CAGGAATTCG GCACAGCATA TCTAGTATTT 60  
 TAGGACGGAG GGA 73

(2) INFORMATION FOR SEQ ID NO: 1549:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1549:

40 GTATCCAAGC AGCTTTTAAA CAATATGGCA TAAACATTAT TAACGGCTAT GGTTTAACTG 60  
 ATGGCACCTC TTG 73

(2) INFORMATION FOR SEQ ID NO: 1550:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1550:



GTAACATGTA TAGTGAAGTG ACTACTAAGA AGnCGTATTG TGATATTGAT AGCAGCTGAT 120

(2) INFORMATION FOR SEQ ID NO: 1551:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1551:

GGTATGTATT AATTAAAATG TGGTCATGAT TGAAACAGCA ATGTAAAAAT AGCACAACAT 60  
 AATTnATAAA GGAGAGAAAC GGCATGCATG AACAAGATTT TAGAATTTTA GAGGGTCAAG 120  
 ATATTACTTT GCCAGAATTA GGTAGAGAAT TAGAnAATAT TACAGGACAT ACGATTGCTG 180  
 ATTCTACTGG CG 192

(2) INFORMATION FOR SEQ ID NO: 1552:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 76 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1552:

CTAAGTTAGA TGCTAGTATA CAAGATTTAC AACAAAAGGT ACTGGAATCG AATTGTGAAC 60  
 TAGACAAACT AAATC 76

(2) INFORMATION FOR SEQ ID NO: 1553:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1553:

TGTGTTGGGG CCCCGTATAT TGAAAATTTG TTATAGGTGT ATTTCTTTGG TTAACATTTG 60  
 TTATATAACT TGTAGTTTTA GGATGTTGAT TTTGCTTACC TTGTCTGCTA TGTAATGTCA 120  
 CATCAACATG ATThA 135

(2) INFORMATION FOR SEQ ID NO: 1554:

(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1554:

10 TTTGAnATCA AATTCAC TTC GCAAACGTGT CCAAGCGTGA GCAAAGGGCT AGATGATTAA 60  
TAGTTGCCCC ACTAACGGGA TCGCCCCAGT TATCCAAC TT ATCT 104

(2) INFORMATION FOR SEQ ID NO: 1555:

15

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 100 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1555:

25 AATAAGAAAC AnGACACTAG CTCACCACGA CGCGCACGGC CTGCGTGTA AATGTTGGT 60  
GGCGCGGGTT GGAGATCGTG TTCAACCAGA GCAGAAAATA 100

(2) INFORMATION FOR SEQ ID NO: 1556:

30

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 86 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1556:

40 CAATGAAATT ATTTATTATT TTAAGTGCAT TAAACCCCGA TGATGGCTGT CCGGTACCAG 60  
GTGCATTTTG GTGCCCATGG TTTACC 86

(2) INFORMATION FOR SEQ ID NO: 1557:

45

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1557:

55 GTCATGTTCC CATCAAACT AATTTGTACT TACTAAAGGC TCAGCAGCGC AACCAATTAGG 60

## (2) INFORMATION FOR SEQ ID NO: 1558:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 82 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1558:

AACTGGTTAC AGAAATACCA CGTTCTTGTT TCAACTTTCA TCCAGTCACT TGATCGCAAA 60

TTTACCAGTC TTCTTCCCTT TA 82

## (2) INFORMATION FOR SEQ ID NO: 1559:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 78 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1559:

CCACAGCGGC ACTATAGCCA GCCCCTAATA TATACAGTAT TTGCATCTGA CTCATTGGTT 60

CATAAGTATA TGCAGTGA 78

## (2) INFORMATION FOR SEQ ID NO: 1560:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 76 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1560:

ACCATTTGCT AACTTTTTAG CAGCGCAATG TTCTTATTAA CTGCTTACGC CATCTATAAA 60

AATAAACGTT CAACAA 76

## (2) INFORMATION FOR SEQ ID NO: 1561:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

TTGGAACCCA AATTTTTTTTA ATTTTCCCAA AAATTGGGGG GGGACCCCA ATTCCCTTAA 60  
 GGGTTTTCCT TGGGGGCCGG GGGTTAATTC CACCCGGGGT TAAAATTTTC CCAAAAATTA 120  
 5 ATTTTnGAAA AGTTTnTAATT TAAGGAAACC CATnGTCCG GAATTTTnTAC CCCATCCTTA 180  
 TGGGGGGTCC CAAAGATTCC 200

(2) INFORMATION FOR SEQ ID NO: 1562:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1562:

20 AACACAGAGA ATAACCAAGA GAAGACGTTT TCATCTGAAG AAAGTAACAG TAmGCCATTT 60  
 ATGGAAGAAA ATCAAAACGA TGAGATAGTT ATAAAAGAAG ATTCATATAA TCCATTCGTA 120  
 ACGAAAACAT CTGAAAGTTT AATAGCTGAT GATGAATCTT CTGGTTATAA TAATACACGT 180  
 25 GAAAAAGATG AAGACTACTT CAAAAAACAA CAAGAAATTT TACAAGAAAT GGATCAAACA 240  
 TTTGATTCAA ATGATGGTAC AACTGTGCAA AATTATGAGA ATAAAGCGTC TGATGATTAT 300  
 TATGATGTAA ACGATATTAA AGGAACAAAA AGTAAAGACC CTAAACGAGG AATTCCATAT 360  
 30 ATGGAATTGT TGGnCAGTCA TGGAACGTTA TTATTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 1563:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1563:

45 TCTTCATCAT CTTCTAATTT ACCAGCTGGA ATTTCTAGCA ATGGTTTTTC TACTGGTTTA 60  
 CGATACTGTT TCACTAATAC GACTTCTTTT TTAGGTGTCA CTGCACAAAC ArCAACTGCA 120  
 CCATTATGAT AACTAATTC TCTTGTTGAC GTTTCACCGT TTGGTAATGT CACTGTATGA 180  
 50 ATTTCTACAT CTACAATTTT GCCATTATAA ATAAGTGTTC GATCAATTGT TTTTTCATTT 240  
 AAATCCATTA TAATCACGTT CCTTTAAATT CATATTATAT ATTGATACAC TATGCTTGTT 300  
 AGCTAAAGTG TATCGAAAGG AGAACAGACA TGCAAAAAAA TATATTAAAA AGTGGTATTT 360

AAATTATAGG ATTGTGCTGT TGAAAATGGG TATC

454

## (2) INFORMATION FOR SEQ ID NO: 1564:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1564:

ACATCTCGCA TCGTCACGAC TTGCTTGAAC CACTAGCAGG TCAAACAAAG CTGTACAGGC 60  
AACATCTGC 69

## (2) INFORMATION FOR SEQ ID NO: 1565:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1565:

TCCAGAACCA TTTTAAATCC CGGGAAATAT AATTACCTCC ACTAANGTAA TATATCCAAG 60  
CCAAGACTAA TCCTCCTTAA GCCGGTTTAA GTAACCAGGT TGAGAAGGAT TTTTGG 117

## (2) INFORMATION FOR SEQ ID NO: 1566:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

TATTGAGATT AACAGTCTGG GAAAAATGAA CAGCAATTGT nTAATGTGAC GATGCTGATT 60  
ACTTTTAAAC AGTATCATTT AATAACTCAG AGATGCGCTT TAT 103

## (2) INFORMATION FOR SEQ ID NO: 1567:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 81 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1567:

AATGGATGGG ACAGCAATTA GTGCATAACG ACAATATATG CTCAATTTGT CGGCAACTGG 60  
 TTAAGAATCG TATTGTCACA A 81

(2) INFORMATION FOR SEQ ID NO: 1568:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 80 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1568:

AATGGATTCA GTAGGTATTG GTGAAGCGCC AGACGCAGCT GATTTGAAAG ATGAAGGTTTC 60  
 ACATACTTTT AGCATACCTT 80

(2) INFORMATION FOR SEQ ID NO: 1569:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1569:

TTTTTAAATA CGATTTTAAAG GAGGCCATTA TAATGGCGAG TAAAAGTAGC GAATTAATGG 60  
 TTTTGGTTAG GAATTGGTCG TTTAGGCATT CAGGA 95

(2) INFORMATION FOR SEQ ID NO: 1570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1570:

CCCAATAAAA AAAGCCTGTT GTCACAATGG TCATAGACAC GTACATACTT TAAAGGTTTC 60  
 TGTAATATAA ATATTTTATA TGCCACTTTA AAGTTGGnAC GTTCGTATGT TGTACTAA 118

(2) INFORMATION FOR SEQ ID NO: 1571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1571:

GACTTGATCA ATGAAGCATT GTGTGACAAT TGGTCTGTTT GCACACCGCA CGGATTGnGC 60

10

GTCATTTATT TGTACTAATT CAAAAACAT TGTTGTTTTTC CTAG 104

(2) INFORMATION FOR SEQ ID NO: 1572:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1572:

CCGAAGTGTA ATGGTCCTAA TGTTTTACTC ATACCATATT GCGTAACCAT TGAGCGGCGA 60

25

TTGTGTTGCA CGTCGAGCAT TGAGACCGTT GTACTCGTAA nGTATATCTC TGTACACG 118

(2) INFORMATION FOR SEQ ID NO: 1573:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1573:

AGGGATCAAA GGTCCATCCC CCATGCATTG GATAGTGGGG GATGACTTTT GATCCTATGT 60

40

TCCAGTTGCT TATT 74

(2) INFORMATION FOR SEQ ID NO: 1574:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1574:

AACCTTTTGA GTAAATTCAC CAATACTCAT CCCCTTATCA TTTAACAAC TTTTATTAAT 60

GTTTTTGTT ATATTATGAG TCTTTACTGC TTTTAGATTG TAAAAATTAT CGTCATAAAT 120

55

GTAATTAATG TAATAATAGA AAAGTGTATA TATCTCATAT CGCCACCTGC TATACAACCTT 240  
 ATTAAATAAT TAATTCCAAG ACATATTAAT TATCTAATTA TAACCTTAGT TnACGTTATT 300  
 5 ACATAATATA AAAATATATA ATAACCTTATC CnCCGGCnCC T 341

## (2) INFORMATION FOR SEQ ID NO: 1575:

- (i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1575:

ACGTGTACCA ACTTTTGGGC ACCATTGATA ATAnGTGTCA TAGGGTGA CT CAGCATAACG 60  
 20 GGCAAGCCTA TTAATGATAG CCAGATTAAG ACATACAGTA CATATGTTC 109

## (2) INFORMATION FOR SEQ ID NO: 1576:

- (i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 79 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1576:

GCTAGATTGC GGAATTAAC AATCATCAGC GATTTAATAT TTGCACTGGA GACGTCATGG 60  
 30 TAATAAAAAA TTGATGAGA 79

## (2) INFORMATION FOR SEQ ID NO: 1577:

- (i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1577:

ATGATGGCTA TCATGAGATT GAGATGATAA TGACAACAGT TGATTTGAAA TGATCGTGTA 60  
 ACTTTTCAT 69

## (2) INFORMATION FOR SEQ ID NO: 1578:

- (i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 104 base pairs